University Name: **Tikrit University**

Scientific Department: Horticulture and Landscape

Name of Academic or Professional Program: Horticulture and Landscape Engineering

(Study System: Semester System (Courses

Description Preparation Date: \ 10\2024

File Filling Date: \ 10\2024

:Signature:

Name of Head of Department:. Dr. Angham Ayad Kamal El-Din 1/10/2024

Signature

Name of S. Assistant of dean : Dr. Muhammad Salih Muhammad 1/10/2024

Document Reviewed:

Name of Director of Quality Assurance and University Performance Division:

Date: 1/10/2024

Signature:

Approval of the Dean

Teaching staff

No.	Full name	Degree	Academic Title	specialty	
				major	minor
1	Thamer Abdullah Zahwan Khalifa	PhD	Professor	Agriculture - Horticulture	Medicinal and aromatic plants
2	Ammar Fakhri Khader Shaaban	PhD	Professor	Agriculture - Horticulture	Plant ecology and environmental pollution
3	Adeeb Jassim Abbas	PhD	Professor	Agriculture - Horticulture	Plant tissue culture
4	Harith Burhanuddin Abdul Rahman	PhD	Professor	Agriculture - Horticulture	Vegetables
5	Ziad Khalaf Saleh Ali	PhD	Professor	Agriculture - Horticulture	Ornamental plants
6	Ehsan Fadel Saleh Othman	PhD	Professor	Agriculture - Horticulture	Fruit production
7	Mustafa Rashid Majeed Qaddouri	PhD	Professor	Agriculture - Horticulture	Biotechnologies
8	Mohammed Abdullah Ahmed Musa	PhD	Professor	Agriculture - Horticulture	Plant physiology
9	Rabi Abdul Abdullah	PhD	Professor	Agriculture - Horticulture	Forest insects
10	Ghassan Jaid Zidane	PhD	Professor	Agriculture - Horticulture	Vegetable production
11	Mahmoud Fadel Latif	PhD	Professor	Agriculture - Horticulture	Fruit production
12	Taha Shihab Ahmed Othman	Ph	Professor	Agriculture -	Medicinal and

		D		Horticulture	aromatic plants
13	Ammar Hashim Saeed Omar	Ph D	Professor	Agriculture - Horticulture	Vegetable breeding
14	Khaled Naji Abdul Asal	Ph D	Professor	Agriculture - Horticulture	Harvesting and storage of horticultural crops
15	Qutaiba Yasser Ayed Majeed	Ph D	Professor	Agriculture - Horticulture	Vegetable production - protected cultivation
16	Nazim Salem Ghanem Suleiman	Ph D	Professor	Agriculture - Horticulture	Plant tissue culture
17	Anas Munir Tawfiq Najm	Ph D	Professor	Agriculture - Horticulture	Plant physiology
18	Riyadh Manaa Mohsen	Ph D	Professor	Agriculture - Horticulture	Ornamental and garden engineering
19	Ashjan Nizar Kamel Farhan	Ph D	Lecturer	Agriculture - Horticulture	Ornamental plants
20	Ibrar Aqeel Nasser Ahmed	Ph D	Lecturer	Agriculture - Horticulture	Vegetables
21	Biram Suleiman Ismail	Ph D	Lecturer	Agriculture - Horticulture	Agricultural plant technologies
22	Sabreen Mohammed Latif	Ph D	Lecturer	Agriculture - Horticulture	Harvesting and storing horticultural produce
23	Angham Ayad Kamal El-Din Ali	Ph D	Lecturer	Agriculture - Horticulture	Ornamental plants
24	Marwa Noman Hussein	Ph D	Lecturer	Agriculture - Horticulture	Fruit

25	Maha Ali Suleiman	Ph D	Lecturer	Agriculture - Horticulture	Fruit
26	Ammar Walid Taha	Ph D	Lecturer	Agriculture - Horticulture	Fruit
27	Samir Hussein Alwan	Ms c	Lecturer	Agriculture - Horticulture	Horticulture and landscaping
28	Mazen Amer Awin Jumaa	Ms c	Lecturer	Agriculture - Horticulture	Horticulture and landscaping
29	Reem Tariq Ibrahim Hamad	Ms c	Assist. lect.	Agriculture - Horticulture	Horticulture and landscaping
30	Omar Arshad Omar	Ms c	Assist. lect	Agriculture - Horticulture	Horticulture and landscaping
31	Maysar Awad Abdullah Matar	Ms c	Assist. lect	Agriculture - Horticulture	Horticulture and landscaping
32	Mahmoud Jassim Mohammed Houri	Ms c	Assist. lect	Agriculture - Horticulture	Horticulture and landscaping
33	Nasr Shukri Darar	Ms c	Assist. lect	Agriculture - Horticulture	Horticulture and landscaping
34	Rawa Abdul Bashir	Ms c	Assist. lect	Agriculture - Horticulture	Horticulture and landscaping
35	Sara Hamid Bahr	Ms c	Assist. lect	Agriculture - Horticulture	Ornamental plants

About the Department:

The Department of Horticulture and Landscape Engineering was established in the academic year 2003-2004 with the aim of preparing agricultural engineers in the field

of horticulture and landscape engineering who are able to work in state institutions or the private sector in the field of horticultural sciences specialized in producing the agricultural products that society needs, such as fruits, vegetables, ornamental plants, and designing, coordinating and implementing public and private gardens in a way that achieves food provision and adds aesthetic values and environmental benefits. Therefore, the curricula of the Department of Horticulture and Landscape Engineering included three main directions: fruits, vegetables and ornamental plants, and then a new direction emerged regarding the production of medicinal plants. The academic program of the department takes four years (eight semesters), after which the graduate is awarded a Bachelor's degree in Horticulture and Landscape Engineering. The department also receives many postgraduate students at the levels of higher diploma, master's and doctorate.

Academic Program of the Department:

The department grants a Bachelor's degree in Agricultural Sciences / Horticulture and Landscape Engineering

Second: The main criteria for program accreditation for colleges of agriculture:

Department Vision

1- The vision was formulated by qualified professors specializing in horticulture and landscape engineering.

2- The vision was discussed with the beneficiaries represented by the Directorate of Agriculture in the governorate, the Agricultural Research Department, and some private companies present in the private sector, as well as distinguished farmers and other agricultural cadres inside and outside the college.

3- The final formulation of the vision was discussed in the Department Council and the College Council.

4- A questionnaire was directed to the beneficiaries and stakeholders from faculty, students and graduates about the clarity of the vision.

Department Message:

1- The department's message was formulated by a group of department professors to be consistent with the college's message.

2- The message was discussed with the beneficiaries represented by the Salah al-Din Agriculture Directorate, the Agricultural Research Department, a representative of agricultural associations, and representatives of parties related to the agricultural and environmental sector.

3- The previous message of the department was reviewed.

4- A questionnaire was directed to beneficiaries and stakeholders from faculty, students and graduates about the clarity of the message.

5- Discussions of reformulating the message were announced on the college website.

6- Priorities for this element.

Department objectives:

1- The program objectives are divided into general and annual objectives and are announced on the college's official website.

2- The program objectives are consistent with the college's objectives.

3- The program objectives were reviewed and discussed with the beneficiaries.

4- A questionnaire was directed to beneficiaries and stakeholders from faculty, students and graduates about the clarity of the program objectives.

Admission Policy:

A- Admission of students to the college is centralized according to the instructions stated in the Student Guide for Central Admission Dalel20232024.pdf (mohesr.gov.iq) and the admission policy is determined by the Ministry of Higher Education and Scientific Research and we have no role in the admission policy.

B- Admission to the department is according to

- The student's average in preparatory studies.
- The student's desire.
- The department's capacity.

Number of students: The department always plans to accept about 50 students, but the number of students we get gradually decreases every year due to the great expansion in opening private universities and colleges, which leads to students' reluctance to apply to this department, in addition to the lack of job opportunities for graduate students.

Academic Guidance:

1- The program includes visits and scientific trips, and guidance sessions are held for new students every year, but unfortunately we did not document these activities.

2- The department has an educational supervision committee distributed among the number of students to help the student socially and psychologically and work to solve the problems they face.

3- There is a form submitted to students annually to take their opinions called the Student Opinion Questionnaire about the educational institution and the student's satisfaction with the instructor and it is distributed to all stages and is included in the annual evaluation of the instructor.

Student Services:

Many student services are available to university students in general and students of the College of Agriculture in particular. As for the services designated for students of the Horticulture Department, we are working hard to raise the level of services provided to students within the capabilities available to us. The most important of these services are:

1. Student services are available represented by the student center (restaurant) and health services represented by the health center, football field and college library.

2. There is a financial support program (student grant), but according to special controls and instructions.

3. A (Student Reception Committee) is formed annually by the college, for the purpose of receiving and guiding new students.

4. Extracurricular activities are held annually (whether sports, artistic or cultural).

5. There is a counseling and psychological guidance unit in the college and it has a committee in each department whose tasks include awareness and guidance.

6. Many scientific visits are held for students accompanied by the teaching staff.

7. There are laws and instructions for student discipline, dismissal, postponement, failure due to cheating, absence, and annual tuition fees for evening studies.

Graduation requirements:

1- Third-year students are subject to summer training in agricultural departments and institutions related to agricultural and environmental work. This training is one of the graduation requirements, as the trainee is sent with an official letter and then returned with an official letter and an evaluation form confirming that the trainee has successfully completed the training period.

2- The students' grades obtained during the years of study are kept in a special record (master sheet) in several copies kept in the department, the registration department, and the office of the assistant dean for academic affairs.

Learning Outcomes:

1- The curricula for students of the Horticulture Department, especially in the field of micro-specialization, are designed to provide the student with appropriate information and knowledge through the theoretical part, while the practical part aims to train the student and provide him with the applied skills that will serve him in field work later.

2- The student's acquired knowledge is evaluated and measured through theoretical semester and final tests, as is known, while the students' skills are evaluated through field and laboratory tests conducted in practical lessons.

3- The program is designed to provide the student with knowledge and skills and link him to the community and workers in the agricultural field through field visits and annual scientific trips.

4- The summer training, which is one of the graduation requirements, aims to integrate the student into the reality of agricultural work, and through this practice he builds his connections with the community of farmers or specialists in this field, whether employees or citizens. This practice may also teach some of the trainees something about management processes and writing practices, depending on the entity in which the student is trained.

5- Developing the academic program of the department to provide the student with scientific skills in the field of diagnosing problems and finding scientific solutions by conducting field experiments, recording data, analyzing it statistically, and then interpreting it to reach the appropriate recommendation. All of this is done through graduation research conducted by the student in the final stage under the supervision of specialists from the department's professors.

Curricula:

1- The department relies on curricula approved by the sector committee or the deans' committee and approved by the Ministry of Higher Education and Scientific Research according to detailed terms of the number of hours, units, theoretical and practical, as shown in Table (4).

2- A course description is prepared annually for all program courses that includes the cognitive, skill and emotional objectives for each subject in line with the department and college objectives. This description is approved by the head of the department, the assistant dean of science, and the quality department in the college.

3- The student is evaluated through the grades he obtains in oral and written tests and reports.

4- All available and diverse modern educational methods are used.

5- There is a university calendar issued by the Ministry and circulated to all universities, which includes the start and end times of the program.

Academic Program Evaluation

1- General information about the academic department

University Name Tikrit
Administration Name Phone Mobile Phone Email
Dean Waad Mahmoud Raouf
Head of Department Dr. Angham Ayad Kamal El-Din / 07739638581
Quality Officer Dr. Aslam Saud Alwan / 07717415743
College: Agriculture
Department: Horticulture and Landscape Engineering
Number of Branches in the Department (None)
Date of Establishment of the Department: 2003
Name of the Academic Program: Horticulture and Landscape Engineering, Date of Start of Study: 2003-2004
Teaching System Followed: Semester
Number of Credit Hours for the Academic Program: (hour)
Website Address on the Internet: https://cagr.tu.edu.iq/index.php/alaqsam-al-lmyt/qsm-albstnt-whndst-alhdayq

2- Department buildings

Department Buildings Number Average Area (m2) Average Number of Users Average Hours of Operation or Use
Library 1 300 / 6
Classrooms 5 50 17 6
Research Laboratories 2 70 17 10
Computer Laboratories / / / /
Machinery and Equipment / / / /

Centers (Educational Technologies, Tests and Measurements (/ / / /
Technical Workshops / / / /
Administrators' Offices 3 25 1 6
Faculty Members' Offices 22 30 4 6

3- The department that offers the academic program and its specialized programs.

Department Name	(General Program) Branch Name
(Specialized Program) Date of Establishment Number of Undergraduate Students Number of Postgraduate Students Number of Faculty Members (Masters) Number of Faculty Members (PhD)	Horticulture and Landscape Architecture / 2003 60 33 9 26

4- Administrative employees in the department according to academic qualifications.

Academic qualifications of administrative employees Number of employees on permanent staff Number of employees on contracts
Master’s or higher 35 /
Higher diploma / /
Bachelor’s 2 /
Technical diploma / /
High school / /
Below high school 7\

5- Library: It is affiliated with the college, not the department:

Academic Program Materials Number
Paper Books
E-Books
Encyclopedias and Dictionaries
Periodicals
Electronic Databases
Devices for Research
Seats for Reading
Total Staff in the Library

Community Service

1- Most of the field experiments and research conducted by faculty members or graduate students aim to serve the agricultural sector, which is the cornerstone of providing food and community security.

2- In recent years, the department has been working to improve the environment through studies and experiments that identify plants capable of purifying the air and getting rid of air and soil pollutants.

3- A number of graduate students have conducted their experiments in private fields in the governorates of Salah al-Din, Kirkuk and Sulaymaniyah, which provides an opportunity for farm owners to learn about research activity and benefit from its results to develop their farms.

4- The college's consulting office provides various community services such as technical consultations and feasibility studies in establishing orchards, agriculture, protected areas and other fields of horticulture and landscape engineering.

5- The department coordinates through the college with other state institutions in cooperation with scientific research for graduate students and employing its results in applied fields related to the current agricultural reality.

6- The department organizes open scientific seminars in the fields of horticulture.

7- The department cooperates with civil society organizations in organizing training courses, seminars and agricultural exhibitions.

8- The department benefits from social media services to communicate with community members and publish useful information on its official page. 9- There are statistics for research published in reputable journals with an impact factor, and there are statistics on scientific development, programs, and a database. Letters of thanks are granted by the Dean and the President of the University, appreciating the efforts of researchers who keep pace with the scientific research movement

Learning Outcomes:

1- Helping instructors reformulate the program outcomes and educational objectives of the subjects they teach with the help of quality assurance committees.

2- Communicating with graduates in their workplaces to find out their need for continuing education through seminars, workshops or field days that help them develop their skills, and working on that.

3- Preparing a database for the number of graduates employed and the entity in which they were employed.

Continuous improvement of the academic program

1- Conducting a program evaluation process every three years.

2- Developing clearer quality indicators and following up on them.

3- Holding periodic meetings on the quality of quality assurance management processes.

4- Increasing communication with students and graduates about the quality of the program.

5- Hiring experts from relevant sectors to review the program's vocabulary and plans.

Curricula:

1- Seeking to update the curricula in cooperation with the sectoral committee in the ministry.

2- Update the curriculum vocabulary annually according to the requirements of the labor market.

3- Increasing interest in practical training in the field and laboratory and providing its requirements.

4- Forming annual committees for the task of planning or evaluating the department's programs and developing them.

5- Participating students in evaluating curricula through questionnaires.

Faculty members and supporting staff

1- Seeking to obtain financial support for faculty members to attend international conferences.

2- Increasing the number of administrators on the department's staff to reduce the administrative burden on faculty members.

3- Paying attention to the quality of training courses for the department's staff to increase their knowledge and skills.

4- Seeking to activate the annual staff settlement system previously in effect.

5- Educational, professional and academic qualification for new instructors.

Resources and learning environment:

1- Seeking to obtain funding that meets the needs of the department.

2- Working to provide sufficient rooms and offices for instructors to achieve appropriate privacy.

3- Activating the role of the department's specialized staff in the agricultural advisory office.

4- Conducting field days and seminars with relevant parties and beneficiaries of the program in the private sector.

5- Building strong relationships with the local community through various agricultural activities.

Leadership and Institutional Organization:

1- Clearly and accurately define the powers of those in charge of the program without ambiguity or interference.

2- Involve students in making decisions related to the educational process.

3- Work to activate the role of the department in selecting faculty members.

4- Work to activate the college's website.

5- Develop and enhance the technical and professional skills and capabilities of administrative cadres.

Community Service:

1- Cooperation with professional unions associated with the program, especially the Syndicate of Agricultural Engineers and agricultural associations.

2- Communicate with beneficiaries to identify their related problems and try to find appropriate solutions through research projects of faculty members and graduate students.

3- Provide training programs and activities concerned with the needs of society and sustainable development.

4- Prepare informational brochures about the program and publish the department's activities on official social media sites.

5- Continue conducting studies and surveys to learn the community's views on the program.

Course Description Form

Course Title: Computer

Course Code: ST COMP101

Semester / Year: First Stage / Spring Semester

Date of Description Preparation: 1 / 9 / 2024

Available Attendance Mode: Compulsory In-person

Total Study Hours: 5 Credit Units: 3

Course Instructor: Lect. Mahmood Jasim Mohammed

Email: Mahmood.J.Mohameed@tu.edu.iq

Course Objectives

To provide students with theoretical and practical knowledge in computer science that contributes to the preparation of high-level graduates ready to enter the professional field.

Teaching and Learning Strategies

Theoretical:

- Theoretical lectures in the classroom.
- Use of presentation tools (PowerPoint, educational videos).
- Discussions and dialogue to deepen understanding.
- Assigning students short research papers and reports.

Practical:

- Practical training in the computer laboratory.
- Applications on operating systems (Windows/Linux).
- Exercises on Microsoft Office applications (Word, Excel, PowerPoint).
- Internet and search engine applications.
- Assigning students to complete small projects (presentations, simple databases).

Course Structure

Week	Hours (Theory)	Hours (Practical)	Topics
1	2	3	Introduction to the computer and its components / Identifying parts and operating system
2	2	3	Operating systems / Practical applications on Windows
3	2	3	Software and its types / Installing programs and managing files

4	2	3	Word processing / Practical application on MS Word
5	2	3	Spreadsheets / Practical application on MS Excel
6	2	3	Monthly Exam / Practical Exam
7	2	3	Presentations / Practical application on MS PowerPoint
8	2	3	Internet and its services / Using email and search engines
9	2	3	Information security / Data and password protection exercises
10	2	3	Introduction to databases / Practical application using Access
11	2	3	Monthly Exam / Practical Exam
12	2	3	Introduction to programming languages / Simple application using Python
13	2	3	Computer applications in agriculture and sciences / Mini project using computer
14	2	3	Modern trends in computing (AI, Cloud, IoT) / Student project presentations
15	2	3	General review

Course Assessment

Student evaluation is based on performance in theoretical and practical exams, preparation of reports, and daily quizzes, distributed according to the adopted academic system.

Learning and Teaching Resources

Prescribed Textbooks: 'Fundamentals of Computers' – by Dr. [Author Name]

Main References (Sources): —

Supplementary References (scientific journals, reports, etc.): —

Electronic References, Internet Websites: Scientific journals and specialized sites

Course Instructor: Lect. Mahmood Jasim Mohammed

Head of the Scientific Committee: Prof. Dr. Harith Burhan Al-Din Abdulrahman

Head of Department: Dr. Angham Iyad Kamal Al-Din

Course Description Form

Course Title: Plant Ecology

Course Code: PLEC205

Semester / Academic Year: Spring Semester / 2024–2025

Date of Course Description Preparation: 15 / 12 / 2024

Attendance Format: Mandatory In-person Attendance

Total Study Hours / Credit Units: Total: 5 hours Credit Units: 3

Course Instructors:

Prof. Ammar Fakhri Khudair Email: dr.ammar@tu.edu.iq

Asst. Lecturer Nasr Shukri Darrar Email: nasr_alalwsy@tu.edu.iq

Course Objectives:

Understand the relationship between plants and environmental factors such as light, water, soil, and temperature.

Identify the role of plants within ecosystems and their contribution to biological balance.

Study how plants adapt to various environmental conditions and their mechanisms of stress resistance.

Evaluate the effects of environmental and climatic changes on plant growth and distribution.

Apply ecological knowledge of plants in sustainable agriculture and biodiversity conservation.

Teaching and Learning Strategies:

Theoretical:

Classroom lectures.

Use of visual aids to clarify theoretical, physiological, and other scientific foundations.

Discussions and debates to reinforce scientific and practical concepts.

Asking and analyzing questions.

Assigning students to prepare complementary reports related to lecture topics.

Practical:

Direct lectures focusing on the basics of horticultural operations and crop management.

Presentation of PowerPoint slides and scientific films relevant to the subject.

Field visits to college farms and other relevant sites.

Implementation of agricultural practices in nurseries, fields, or laboratories to enhance student skills.

Assigning students to prepare reports or projects relevant to the course.

Course Structure:

Week	Hours	Topics
1	2 Theory / 3 Practical	Introduction to Plant Ecology – Ecology and Ecosystem
2	2 / 3	Atmospheric Components and Layers – Soil Thermometers
3	2 / 3	Water – Moisture Measuring Devices
4	2 / 3	Dependence on Rainfall – Humidity, Wind, and Measurement Methods
5	2 / 3	Biotic Factors – Evaporation, Precipitation, and Sunlight
6	2 / 3	Solar Radiation – First Practical Midterm Exam
7	2 / 3	First Theoretical Midterm Exam – Aquatic Environment and Measurement Methods
8	2 / 3	Fires – Soil Sample Preparation for Laboratory Study
9	2 / 3	Atmospheric Pressure – Soil Component Separation and Digestion Methods
10	2 / 3	Temperature – Soil Texture and Its Identification (Part 1)
11	2 / 3	Effect of Temperature on Plant Physiological Characteristics – Soil Texture (Part 2)
12	2 / 3	Effect of Light on Plant Physiological Characteristics – Soil Organic Matter (Part 1)
13	2 / 3	Ecosystem Characteristics – Soil Organic Matter (Part 2)
14	2 / 3	Review and Summary of Each Topic – General Revision
15	2 / 3	Second Theoretical Midterm Exam – Second Practical Midterm Exam

Course Evaluation:

Student performance is evaluated through theoretical and practical exams in laboratories and fields, in addition to report preparation and short daily quizzes. Grades are distributed in accordance with the adopted academic system.

Learning and Teaching Resources:

Prescribed Textbooks (if any): None

Main References:

• Ecology for Agriculture Students — Hikmat Abbas Al-Ani & Raad Hashem Bakr (1984)

Supplementary References (recommended books, journals, reports, etc.):

• Plant Ecology — Dr. Iyad Hussein Al-Mu'aini (2014)

Electronic References / Websites:

• Scientific journals and specialized websites

Course Description Form

Course Title: Computer

Course Code: ST COMP101

Semester / Year: First Stage / Spring Semester

Date of Description Preparation: 1 / 9 / 2024

Available Attendance Mode: Compulsory In-person

Total Study Hours: 5 Credit Units: 3

Course Instructor: Lect. Mahmood Jasim Mohammed

Email: Mahmood.J.Mohameed@tu.edu.iq

Course Objectives

To provide students with theoretical and practical knowledge in computer science that contributes to the preparation of high-level graduates ready to enter the professional field.

Teaching and Learning Strategies

Theoretical:

- Theoretical lectures in the classroom.
- Use of presentation tools (PowerPoint, educational videos).
- Discussions and dialogue to deepen understanding.
- Assigning students short research papers and reports.

Practical:

- Practical training in the computer laboratory.
- Applications on operating systems (Windows/Linux).
- Exercises on Microsoft Office applications (Word, Excel, PowerPoint).
- Internet and search engine applications.
- Assigning students to complete small projects (presentations, simple databases).

Course Structure

Week	Hours (Theory)	Hours (Practical)	Topics
1	2	3	Introduction to the computer and its components / Identifying parts and operating system
2	2	3	Operating systems / Practical applications on Windows
3	2	3	Software and its types / Installing programs and managing files

4	2	3	Word processing / Practical application on MS Word
5	2	3	Spreadsheets / Practical application on MS Excel
6	2	3	Monthly Exam / Practical Exam
7	2	3	Presentations / Practical application on MS PowerPoint
8	2	3	Internet and its services / Using email and search engines
9	2	3	Information security / Data and password protection exercises
10	2	3	Introduction to databases / Practical application using Access
11	2	3	Monthly Exam / Practical Exam
12	2	3	Introduction to programming languages / Simple application using Python
13	2	3	Computer applications in agriculture and sciences / Mini project using computer
14	2	3	Modern trends in computing (AI, Cloud, IoT) / Student project presentations
15	2	3	General review

Course Assessment

Student evaluation is based on performance in theoretical and practical exams, preparation of reports, and daily quizzes, distributed according to the adopted academic system.

Learning and Teaching Resources

Prescribed Textbooks: 'Fundamentals of Computers' – by Dr. [Author Name]

Main References (Sources): —

Supplementary References (scientific journals, reports, etc.): —

Electronic References, Internet Websites: Scientific journals and specialized sites

Course Instructor: Lect. Mahmood Jasim Mohammed

Head of the Scientific Committee: Prof. Dr. Harith Burhan Al-Din Abdulrahman

Head of Department: Dr. Angham Iyad Kamal Al-Din

Tikrit University

College of Agriculture

Department of Horticulture and Landscape Design

Course Description Form

Course Title: Statistics

Course Code: STED303

Academic Year / Semester: 2024–2025 / Fall Semester

Date of Description Preparation: 1 / 9 / 2024

Available Attendance Mode: In-person

Number of Credit Hours: Theoretical: 2, Practical: 3, Total: 5

Credit Units: 3

Course Instructor: Asst. Prof. Dr. Ammar Fakhri Khudair

Email: dr.ammarhashim@tu.edu.iq

Course Assistant Instructor: Lect. Ammar Hashim Saeed

Course Objectives

To provide undergraduate students with theoretical and practical knowledge in statistics that supports the preparation of highly qualified graduates capable of applying their skills in practical agricultural fields.

This course description summarizes the key features of the course and the intended learning outcomes that students are expected to achieve, demonstrating whether they have made the most of the available learning opportunities. It must be aligned with the program description.

Teaching and Learning Strategies

Theoretical:

- Classroom lectures.
- Using visual aids to clarify theoretical and physiological foundations and related topics.
- Discussion and dialogue to reinforce scientific and practical concepts.
- Asking and discussing questions.
- Assigning students to prepare reports that complement lecture topics.

Practical:

- Direct practical lectures focusing on the principles underlying horticultural operations and crop management.
- Presentation of PowerPoint slides and relevant scientific films.
- Field visits to the college's farms or other sites.

- Application of agricultural operations in nurseries, fields, or laboratories to enhance student skills.
- Assignments and reports related to the course.

Course Structure

Week	Hours (Theory)	Hours (Practical)	Topics
1	2	3	Introduction to statistics and related concepts
2	2	3	Types of data and methods of collection
3	2	3	Frequency distributions and graphical representation
4	2	3	Measures of central tendency
5	2	3	Index numbers
6	2	3	Midterm Exam
7	2	3	Measures of dispersion
8	2	3	Statistical analysis of population data
9	2	3	Principles of probability
10	2	3	Probability distributions
11	2	3	Midterm Exam
12	2	3	Some probability distributions
13	2	3	Sampling and sampling distributions
14	2	3	Estimation of population parameters using confidence intervals (large samples)
15	2	3	General review

Course Assessment

Assessment Method	Week	Score (Theory / Practical)	Relative Weight (%)
Daily quizzes	15	Theory: 5 / Practical: 3	8%
Two midterm exams	6 & 11	Theory: 20 / Practical: 5	25%
Report preparation	9 & 15	Theory: 5 / Practical: 2	7%
Final exam	-	Theory: 40 / Practical: 20	60%
Total	-	-	100%

Learning and Teaching Resources

Prescribed Textbooks: Introduction to Statistics — by Dr. Khasha Mahmoud Al-Rawi

Recommended References: Scientific journals and specialized websites

Course Instructors

Theoretical Part: Prof. Dr. Ammar Fakhri Khudair

Practical Part: Asst. Prof. Dr. Ammar Hashim Saeed

Head of the Scientific Committee: Prof. Dr. Harith Burhan Al-Din Abdulrahman

Head of Department: Dr. Angham Iyad Kamal Al-Din

Course Description Form

Course Title: Date Palm

Course Code: PAPR406

Semester / Year: Fourth Stage / Spring Semester

Date of Course Description Preparation: 1/9/2024

Attendance Format: Mandatory In-person Attendance

Total Study Hours / Credit Units: Total: 5 hours Credit Units: 3

Course Instructors:

Asst. Prof. Khalid Naji Abdul Email: khaildasal@tu.edu.iq

Dr. Ammar Waleed

Dr. Marwa Nouman

Course Objectives:

To introduce students to the date palm, its varieties, and the methods of cultivation and care.

Teaching and Learning Strategies:

Theoretical:

Theoretical lectures in the classroom.
Using visual aids to explain theoretical and physiological concepts.
Discussions and Q&A sessions to consolidate scientific and practical concepts.
Assigning students reports to complement lecture topics.
Practical:

Direct lectures focusing on horticultural operations and crop management.
PowerPoint presentations and scientific films relevant to the subject.

Field visits to college farms or other relevant sites.

Practical application of agricultural operations in the nursery, field, or laboratory.

Assigning reports or practical projects related to the course.

Course Structure:

Week	Hours	Theoretical	Practical	Topics
1	2 Theory / 3 Practical	Introduction to the date palm	Importance of date palm and its original habitat	Introduction to the date palm / Importance of date palm and its original habitat
2	2 / 3	Classification and taxonomy of date palm	Propagation methods	Classification and taxonomy of date palm / Propagation methods
3	2 / 3	Climatic factors affecting date palm growth	Methods of planting offshoots	Climatic factors affecting date palm growth / Methods of planting offshoots
4	2 / 3	Propagation techniques	Irrigation and fertilization	Propagation techniques / Irrigation and fertilization
5	2 / 3	Problems of	Pruning	Problems of

		tissue culture propagation	operations	tissue culture propagation / Pruning operations
6	2 / 3	Factors affecting acclimatization	Organic fertilization	Factors affecting acclimatization / Organic fertilization
7	2 / 3	Pollination	Harvesting operations	Pollination / Harvesting operations
8	2 / 3	First midterm exam	First midterm exam	First midterm exam / First midterm exam
9	2 / 3	Improving cultivation using male palms	Sorting and grading	Improving cultivation using male palms / Sorting and grading
10	2 / 3	Fruit growth and development stages	Economics of packing and marketing	Fruit growth and development stages / Economics of packing and marketing

11	2 / 3	Irrigation methods	Date processing techniques	Irrigation methods / Date processing techniques
12	2 / 3	Important aspects of date palm structure	Crown morphology	Important aspects of date palm structure / Crown morphology
13	2 / 3	Second midterm exam	Second midterm exam	Second midterm exam / Second midterm exam
14	2 / 3	Date palm diseases	Modern service techniques	Date palm diseases / Modern service techniques
15	2 / 3	Importance of cultivar identification	Marketing skills	Importance of cultivar identification / Marketing skills

1- Seeking to obtain funding that meets the needs of the department.

2- Working to provide sufficient rooms and offices for instructors to achieve appropriate privacy.

3- Activating the role of the department's specialized staff in the agricultural advisory office.

4- Conducting field days and seminars with relevant parties and beneficiaries of the program in the private sector.

5- Building strong relationships with the local community through various agricultural activities.

Leadership and Institutional Organization:

1- Clearly and accurately define the powers of those in charge of the program without ambiguity or interference.

2- Involve students in making decisions related to the educational process.

3- Work to activate the role of the department in selecting faculty members.

4- Work to activate the college's website.

5- Develop and enhance the technical and professional skills and capabilities of administrative cadres.

Community Service:

1- Cooperation with professional unions associated with the program, especially the Syndicate of Agricultural Engineers and agricultural associations.

2- Communicate with beneficiaries to identify their related problems and try to find appropriate solutions through research projects of faculty members and graduate students.

3- Provide training programs and activities concerned with the needs of society and sustainable development.

4- Prepare informational brochures about the program and publish the department's activities on official social media sites.

5- Continue conducting studies and surveys to learn the community's views on the program.

Dr. Ahgham Ayad Kamal El-Din

Head of the Department

/10/2025