



Academic Program Description Form

University Name: ...Mosul University

Faculty/Institute: ...College of Agriculture & Forestry

Scientific Department: ...Horticulture & Landscape Design.

Academic or Professional Program Name: Horticulture & Landscape Design.

Final Certificate Name: Bachelor of Horticulture Science & Landscape Design.

Academic System: Semester/courses

Description Preparation Date: 25/3/2024

File Completion Date: 1/4/2024

Signature:

Head of Department Name:

Prof. Dr. Asmaa Mohamed Adil

Date:

1/4/2024



Signature:

Scientific Associate Name:

Prof. Dr. Ali Farouq Al-Ma'athedi

Date:

1/4/2024

The file is checked by:

Department of Quality Assurance and University Performance

Director of the Quality Assurance and University Performance Department:

Assist. Lect. Oday Abdulhadi Adday

Date:

1/4/2024

Signature:

Approval of the Dean

Prof. Dr. Mohamed Younis Al Allaf

1. Program Vision

Excellence and sophistication in academic education, leadership in community service, and quality in scientific research in the fields of horticulture and landscape design .

2. Program Mission

Contributing to achieving sustainable development by preparing a specialized agricultural engineer qualified to work in the fields of horticulture and landscape design, committed to professional ethics, highly competent in terms of science and applied skills, and capable of meeting the needs of the local, regional and global labor market and serving the community at a competitive level through developing scientific research and Continuous self-learning.

3. Program Objectives

preparing specialized scientific staff, trained and with scientific competencies in the field of horticulture and landscape design, who are able to face the challenges of the profession and contribute to achieving sustainable development by preparing a specialized agricultural engineer qualified to work in the fields of horticulture and landscape design, committed to professional ethics, highly competent in terms of science and applied skills, and capable of Meeting the needs of the labor market to contribute to achieving sustainable development by preparing a specialized agricultural engineer qualified to work in the fields of horticulture and landscape design, committed to professional ethics, highly competent in terms of science and applied skills, and capable of meeting the needs of the local, regional and global labor market and serving the community at a competitive level through development. Scientific research skills and continuous self-learning. Local, regional and global, and serving the community at a competitive level through developing scientific research skills and continuous self-learning, competing with their peers in serving the community and meeting the needs of the labor market.

Developing a modern, stimulating educational environment equipped with the latest technologies and advanced equipment that enables the student to compete, create, and differentiate, and creates in him the desire to continue continuous learning, self-development, skills, and the ability to develop performance, work within a team, and make decisions in the field of horticulture and landscape design.

preparing staff familiar with agricultural legislation, legal and social issues, and commitment to work ethics and quality management related to agricultural fields, especially those related to horticulture and landscape design, who are able to manage and employ resources and address problems in agricultural facilities and projects efficiently and perform well in the field of horticulture and landscaping within the framework of preserving natural resources, biodiversity and development. Sustainable.

Possess skills in the areas of language, use of computers, and develop their abilities to use the scientific and practical method in research in the field of horticulture and landscape design and contribute to solving related agricultural problems.

Can analyze the ways in which humans, plants, and soil interact with the general environment in order to promote the conservation of natural resources and protect the environment.

Evaluates the characteristics of soil and water and determines appropriate agricultural use patterns in the field of horticulture and garden engineering under different environmental conditions and conditions to preserve soil from deterioration and water from pollution for the sake of a clean, sustainable environment.

Possesses advertising and marketing skills as well as labeling, presenting and selling food horticultural products.

Capable of analyzing plant and soil processes at the landscape scale, focusing on landscape architecture and training in sustainable garden designs, garden and

park management, and landscape management.

Able to use methods of dealing with wasted foods such as horticultural crop waste and reducing pollution.

Understands horticultural plant production systems and how to integrate their components and manage them in an environmentally friendly and sustainable manner, focusing on greenhouse and greenhouse management skills.

Can evaluate sustainable practices related to preserving the environment and build skills in handling chemicals, fertilizers, and agricultural and horticultural machinery.

He is familiar with the concepts of organic agriculture, the protection of horticultural crops, and applied biotechnology in the horticultural fields.

Able to complete designs based on the environment and urban issues and invest in geographic information systems in the specialty.

It connects the joints of horticultural science in the horticultural industries, focusing on horticultural crops with medicinal and biopharmaceutical dimensions, and focusing on the production of horticultural plants that reduce the harms of global warming.

Learn about the mechanics of building and managing golf courses, football fields, and tennis courts.

Acquires productive skills related to preparing and preparing the land for agriculture and crop service operations using modern agricultural machinery and techniques under different production systems for horticultural crops in diverse environmental conditions.

Uses skills in harvesting and post-harvest practices in managing horticultural crop raw materials and conducting the necessary tests in preparation for their introduction into various industries.

He is able to evaluate and analyze agricultural projects in the field of horticulture, & landscape design, and investing in agricultural natural resources, and develop plans for their growth and development.

It uses modern methods and the analytical approach in planning and implementing fertilization programs, utilizing the land and water units in a sustainable sense, controlling waste, and reducing pollution to obtain an environmentally safe horticultural product.

It uses modern scientific methods of organic and biological agriculture to achieve safe agricultural and horticultural products, and proposes various programs for mineral, organic and biological fertilization within the conditions of preserving soil and the environment and rationing water.

4. Program Accreditation

None

5. Other external influences

- The family problems facing students negatively affect the students' performance in the academic program
- Extracurricular activities help students achieve greater achievements in implementing the academic program
- The economic situation of students and their involvement in work to save money negatively affects their academic performance.
- The student's learning competence from his preparatory studies is one of the most important indicators of excellence in the program's performance

6. Program Structure

Program Structure	Number of Courses	Credit hours	Percentage	Reviews*
-------------------	-------------------	--------------	------------	----------

Institution Requirements	12	22	37.5 %	Basic
College Requirements	27	34	42 %	Basic
Department Requirements	24	94	37.5 %	Basic
Summer Training	1		1.56 %	Basic
Other				

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

7. Program Description

Year/Level	Course Code	Course Name	Credit Hours	
			theoretical	practical
First	DEHR100	Democracy and human rights	2	-
First	ENGL101	English language 1	2	-
First	COMA103	Computer applications 1	-	3
First	MATH104	mathematics	2	-
First	ORCH105	organic chemistry	2	3
First	STAT109	Statistical	1	3
First	PRFI111	Principles of food industry	2	3
First	PRFC112	Principles of field crops	2	3
First	PRSS113	Principles of soil science	2	3
First	PRAP114	Principles of animal production	2	3
First	PAEC115	Principles of agricultural economics	2	-
First	ENGD118	Engineering Drawing	-	3
First	GEBO119	General botany	2	3
First	SURV120	Surveying	1	3
First	AGMM207	Agricultural machines and machinery	2	3
second	CBAP200	Crimes of the defunct Baath Party	2	-
second	ENGL201	English language 2	2	-
second	ARAL202	Arabic language 2	2	-
second	COMA203	Computer applications 2	-	3
second	BICH204	Biochemistry	2	3
second	PRMB205	Principles of microbiology	2	3
second	PAEX206	Principles of agricultural extension	2	-
second	WECO303	Weed Control	2	3
second	PLEN209	Plant environment	2	3

second	PLPH210	Plant physiology	2	3
second	PRGD211	Principles of Gardens Design	2	3
second	GENT212	Genetics	2	3
second	HOEN213	Horticultural insects	1	3
second	PLNU214	Plant nutrition	2	3
second	PLAN215	plant Anatomy	2	3
second	ORCU216	Organic Agriculture	2	3
second	NUPR217	Nurseries and propagation	2	3
third	ENGL300	English language 3	2	-
third	COMA301	Computer applications 3	-	3
third	DAAE302	Design and analysis of agricultural experiments	2	3
third	DEFR304	Deciduous fruit 1	2	3
third	VEPR305	Vegetables production 1	2	3
third	FLOR306	floriculture plants 1	1	3
third	PLGR307	Plant growth regulators	2	3
third	IRDR308	Irrigation and drainage	2	3
third	DEFR309	Deciduous fruit 2	2	3
third	VEPR310	vegetables production 2	2	3
third	FLOR311	Floriculture plants 2	1	3
third	APIC312	Apiculture	2	3
third	DIHP313	Diseases of Horticultural plant	1	3
third	PLBR314	Plant breeding	2	3
third	MEAP315	Medicinal and aromatic plants	2	3
fourth	ENGL400	English language 4	2	-
fourth	COMA401	Computer applications 4	-	3
fourth	REPR402	research project 1	-	3
fourth	REPR403	research project 2	-	3
fourth	SEMN404	Seminars	1	-
fourth	HSHC405	Handling and storage of Horticultural Crops	2	3
fourth	EVFR406	evergreen fruit	2	3
fourth	VESP407	Vegetable seed production	2	3
fourth	VUCE408	Vegetable production under controlled Environment	2	3
fourth	LADE409	Landscape design	1	3
fourth	FAMA410	Farms management	1	3
fourth	GPSF411	Grapes Production and small fruits	2	3
fourth	RAAG412	Rainfed agriculture	2	3
fourth	BIOT413	Biotechnology	2	3
fourth	PLTC414	Plant tissue culture	2	3
fourth	SOFF415	Soil fertility and fertilizers	2	3

8. Expected learning outcomes of the program

Knowledge	
A 1	The student should be able to understand basic sciences and applied sciences related to agriculture
A 2	The student should be able to understand agricultural terms and their synonyms that are commonly used in the countryside.
A 3	The student should be able to understand the assessment of risk elements in agricultural operations, and how to deal with them.
A 4	The student should be able to understand the methods of handling, manufacturing and recycling agricultural waste.
A 5	The student should be able to understand the basics of planning and implementing agricultural business.
A 6	The student should be able to understand the basics of agricultural economics.
A 7	The student should be able to understand the social, economic, and cultural aspects of agricultural societies and their relationship to sustainable development.
A 8	The student should be able to understand the controls and practices of biosafety systems in the field of agriculture.
A 9	The student should be able to understand the concepts of biodiversity and methods of preserving natural resources.
A 10	The student should be able to understand agricultural legislation and professional ethics related to the environment and human health.
A 11	The student should be able to understand the concepts and elements of quality management.
A 12	The student must be able to master basic skills in English, Arabic, computers, democracy, and human rights
Skills	
B1	The student should be able to apply good agricultural practices to increase agricultural production.
B2	The student should be able to produce safe food for humans and animals, while preserving the environment.
B3	The student should be able to use agricultural resources in an optimal way, for sustainable agriculture.
B4	The student should be able to develop an initial budget for agricultural projects.
B5	The student should be able to conduct an analysis of the local market and develop plans to develop agricultural businesses.
B6	The student should be able to plan in light of economic variables: local and global.
B7	The student should be able to determine the priorities necessary for the development of rural communities and non-urban areas.
B8	The student must be able to implement agricultural extension programs.
B9	The student should be able to plan and carry out research under limited guidance.
B10	The student should be able to evaluate and manage agricultural projects, as well as conduct a financial evaluation.
B11	The student should be able to design, plan and implement agricultural research.
B12	The student must be able to carry out agricultural business.
B13	The student should be able to understand and adapt to new and emerging technology in the field of agriculture, including information and communications technology.
B14	The student should be able to implement sustainable practices and technologies for natural resource management.

B15	The student must be able to think independently and be able to work with minimal supervision in the field of agriculture.
B16	The student must be able to adapt and transfer technology, as well as create new technologies.
B17	The student should be able to know, advise and implement agricultural policies and regulations.
B18	The student should be able to sustainably use water and other natural resources in the agricultural field.
B19	The student should be able to understand and work within the organization, business and community management of the rural sector.
B20	The student should be able to identify pests, pathogens, and weeds associated with crops, livestock, and their products.
B21	The student should be able to improve quality and safety along agricultural value chains.
B22	The student should be able to select and manage machines, tools and equipment for agricultural use in different agricultural systems.
B23	The student should be able to sustainably use water and other natural resources in the agricultural field.
C1	The student should be able to observe, collect and analyze data, identify problems and apply knowledge to solve daily agricultural challenges.
C2	The student should be able to design and conduct experiments and reach a logical conclusion.
C3	The student should be able to collect evidence; In order to explain phenomena and estimate risks.
C4	The student should be able to choose the best alternatives; To achieve maximum benefit for the agricultural facility.
D1	The student must be able to communicate appropriately in both languages: Arabic and English.
D2	The applicant must be able to use the computer to write texts, analyze and display data, and use computer applications specialized in the field of the profession.
D3	The student should be able to use appropriate audio-visual means to present data and information.
D4	The student should be able to use information technology to obtain information, data and communication. Presenting and managing information, and interpreting phenomena orally or in writing.
D5	The student should be able to make objective decisions and solve problems in a practical and cost-effective manner.
D6	The student should be able to demonstrate self- and continuous learning capabilities to develop his information and professional skills and translate knowledge into practice.
D7	The student must be able to critically evaluate, self-awareness, creative and innovative thinking, analysis and synthesis
D8	The student should be able to acquire the skills of initiative, risk-taking, flexibility, adaptability, and the ability to anticipate and respond to new situations.
D9	The student must be able to lead, manage, work independently, work in a team, and deal with multicultural others.
D10	The student must be able to demonstrate self- and continuous learning capabilities; To develop his knowledge and professional skills and translate knowledge into practice.
Ethics	
E1	The student must be able to deal professionally, have ethical values, and adhere to regulations and laws.
E2	The student must be able to deal with environmental and economic awareness.

--	--

9. Teaching and Learning Strategies

Interactive lecture, brainstorming, dialogue and discussion, assigning tasks and reports, modeling presentations, blackboard

10. Evaluation methods

Dialogue and discussion evaluation, quick questions, assignment evaluation, short test, written test, and assignment of an assignment
Assignment evaluation and report

11. Faculty

Faculty Members

Academic Rank	Specialization		Special Requirements/Skills (if applicable)		Number of the teaching staff	
	General	Special			Staff	Lecturer
Professor	Horticulture & landscape design			None	12	
Assistant Professor	Horticulture & landscape design			None	5	
Lecturer	Horticulture & landscape design			None	8	
Assistant lecturer	Horticulture & landscape design			None	8	

Professional Development

Mentoring new faculty members

- Developing skills to enhance self-confidence, a positive orientation towards a culture of quality and requirements, enhancing a sense of responsibility, believing in the spirit of teamwork and its role in achievement, and developing a sense of function and moral conscience.

- Evaluating academic courses and plans in coordination with academic departments to ensure that they meet labor market requirements.
- Possessing the skills of guiding and guiding students.
- The ability to produce educational materials according to quality specifications, including academic curricula, media, lectures and educational supplies.

Professional development of faculty members

- Developing educational skills through diversifying teaching methods, dealing positively with and practicing feedback, using educational techniques, and focusing on developing intellectual and competitive skills among students.
- Developing skills to address problems and phenomena affecting the course of the educational process in the college
- Developing the ability to evaluate academic courses and plans in coordination with academic departments to ensure that they meet labor market requirements.
- Developing the ability to measure the satisfaction of beneficiaries (faculty members, students, community) with the educational and research process at the college.
- Evaluating tests and means of evaluating students, and preparing reports to follow up on their results

12. Acceptance Criterion

- **Students are accepted into college programs centrally through the Central Admissions Department at the Ministry of Higher Education and Scientific Research and according to the application channels approved by the Ministry.**
- **Students are distributed among the department's program according to the grade point average and the students' desire.**
- **To be physically fit and healthy based on the medical examination report**
- **The average of the advanced student, according to the minimum averages approved by the Ministry**

13. The most important sources of information about the program

- The main source of program information is the minutes of the committee of experts of the departments corresponding to the Ministerial Department of Horticulture and Landscape Architecture, which is accredited as a scientific body by the Committee of Deans of Faculties of Agriculture.
- The study prepared by the Scientific Committee and the Department Council and approved by the College Council, which includes proposals for modernizing agricultural specializations and simulating the three most important corresponding scientific departments accredited internationally.
- Local and regional market needs

14. Program Development Plan

A plan was developed to develop the program after studying the internal review notes by the faculty members, the quality assurance committees, the department's scientific committee, the department council, the external review of the program, and the students' notes through analyzing the results of student questionnaires for the courses. Notes from the academic advisors and analysis of data from the college's questionnaire committee questionnaires and examination question evaluation reports for all courses. The program is as follows:

- Inadequate practical training
- The lack of a clear mechanism to help struggling students and motivate outstanding students
- Students' lack of familiarity with university regulations governing the educational process
- Success rates for some courses do not conform with the normal distribution chart

Program skills chart

		Learning outcomes required from the programme																
Year/Level	Course Code	Course Name	Basic or optional	Knowledge			Skills							Ethics				
				A52	A56	B18	B20	B44	B47	C53	C54	D1	D7		D21			
Fourth stage	LADE409	Landscape design	Basic	*	*	*	*	*	*	*	*	*	*	*	*	*	*	E1
2023-2024																		

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

