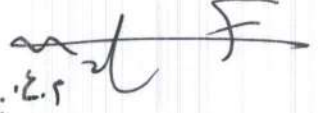






Academic Program Description Form

University Name: **University of Mosul**
Faculty/Institute: **College of Agriculture and Forestry**
Scientific Department: **Department of Food Science**
Academic or Professional Program Name: **B.Sc.**
Final Certificate Name: **Agricultural Economy B.Sc.**
Academic System: **Semesters**
Description Preparation Date: **5/ 2/ 2024**
File Completion Date:

Signature: 
Head of Department Name:
Prof. Dr. Alaa Muhammad Abdullah
Date: 

Signature: 
Scientific Associate Name:
Prof. Dr. Ali Farouq Al-Ma'athedi
Date: **5/2/2024**

The file is checked by:
Department of Quality Assurance and University Performance
Director of the Quality Assurance and University Performance
Department: Assistant Lecturer : **Uday Abdel Hadi Adala**
Date: **5/2/2024**
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 agricultural economics in pursuit of internationalism.

2. Program Mission

Contributing to achieving sustainable development by preparing a specialized agricultural engineer qualified to work in the fields of agricultural economics, 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 self-learning skills. Continuous.

3. Program Objectives

- 1. Qualifying specialized scientific cadres with scientific competence in the field of agricultural economics, to face professional challenges and compete with their peers in serving the community and meeting the basic needs of the labor market.**
- 2. Developing a modern creative environment that is stimulating, equipped, modern, diverse, advanced, competitive and distinguished, creating in it two fires for continuing learning, specialization and distinguished skills to develop practical performance within a different team in the field of agricultural economics.**
- 3. Qualifying cadres familiar with agricultural legislation, legal and social issues, and commitment to work ethics and quality management related to agricultural fields, especially related to the agricultural economy.**
- 4. Managing and employing resources and addressing problems in agricultural facilities and projects with efficiency and good performance in the field of agricultural economics within the framework of preserving natural resources, biodiversity, and sustainable development.**
- 5. Possess skills in the fields of language and computer use and develop their abilities to use the scientific and practical method in research in the field of agricultural economics and contribute to solving related agricultural problems.**

6. 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
7. Evaluates the characteristics of soil and water and determines appropriate agricultural use patterns under different environmental conditions and conditions to preserve the soil from deterioration and water from pollution for the sake of a clean, sustainable environment.
8. Examines the organization structure of the agri-food sector, various agro-industrial supply chains and the development of business skills related to agricultural inputs.
9. Analyze and evaluate agribusiness problems and management decisions using business software.
10. Possess the skills required to manage different types of agricultural businesses (from farms to restaurants).
11. Can know and apply advanced production techniques in agriculture and agro-industrial activities.
12. Able to recognize and use diagnostic tools for major adversities affecting agricultural raw materials and processed food products.
13. Can know the main tools for analyzing and improving the quality of agricultural and agro-industrial products.
14. Can formulate agricultural marketing plans and strategies for both general goods and specialized products.
15. Learns the economic aspects of agriculture and its relationship to resources and the environment by following environmentally sustainable approaches.
16. Can develop an understanding of food production, general agricultural and food policy, trade opportunities, international food aid and international trade.
17. Able to study agricultural production practices, product processing, and agricultural product marketing systems.
18. Understands deeper issues in agriculture, analyzes agricultural systems from an economic perspective and provides advice on management decision making.

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4. Program Accreditation

Will

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 in his preparatory studies is one of the most important indicators of excellence in the performance of the academic program

6. Program Structure

Program Structure	Number of Courses	Credit hours	Percentage	Reviews*
Institution Requirements	13	24	22.42	
College Requirements	16	38	27.58	
Department Requirements	29	127.5	50	
Summer Training	1	Satisfied or not		
Other			100	

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

7. Program Description

Year/Level	Course Code	Course Name	theoretical	practical	Credit	Course Type
2024 – 2023 First Class First semester (Fall)	PREC137	Principles of Economic1	2	3	3.5	Department Requirement
	PRAP114	Principles of Animal Production	2	3	3.5	College Requirement
	PRHS116	Principles of Horticultural Science	2	3	3.5	College Requirement
	MATH104	Mathmatics	2	-	2	College Requirement
	ENGL101	English Language 1	2	-	2	University Requirement
	DEHR100	Democracy and Human Rights	2	-	2	University Requirement
Year/Level	Course Code	Course Name	theoretical	practical	Credit	Course Type
2024 – 2023 First Class Second semester (siping)	PREC138	principles of Economics 2	2	3	3.5	Department Requirement
	ECMA139	Economical Mathematics	2	3	3.5	Department Requirement
	PRPP117	Principles of Plant Protection	2	3	3.5	College Requirement
	PRFC112	Principles of Field Crops	2	3	3.5	College Requirement
	PAEX206	Principles of agricultural extension	2	-	2	College Requirement
	COMA103	Computer Application 1	-	3	1.5	University Requirement
	ARAL102	Arabic Language 1	2	-	2	University Requirement

Year/Level	Course Code	Course Name	theoretical	practical	Credit	Course Type
2024 – 2023 Second Class First semester (Fall)	MIET248	Micro Economics Theory 1	3	3	3.5	Department Requirement
	STAT109	Statistical	3	3	3.5	College Requirement
	PRFI111	Principles of Food Industry	3	3	3.5	College Requirement
	PRSS113	Principles of Soil Science	3	3	3.5	College Requirement
	SOFF415	Soil Fertility and Fertilizers	3	3	3.5	Department Requirement
	COMA203	Computer Application 2	-	-	2	University Requirement
	ARAL102	Arabic Language 2	-	-	2	University Requirement
	CBAP200	Crimes of the defunct Baath Party	-	-	2	University Requirement
Year/Level	Course Code	Course Name	theoretical	practical	Credit	Course Type
2024 – 2023 Second Class Second semester (spring)	MIET249	Micro Economics Theory 2	2	3	3.5	Department Requirement
	AGST250	Agriculture Statistics	2	3	3.5	Department Requirement
	PRPD227	Principles of Dairy	2	3	3.5	Department Requirement
	HSHC405	Handling and storage of Horticultural Crops	2	3	3.5	Department Requirement
	AGME20 7	Agricultural machines and Equipments	2	3	3.5	Department Requirement
	RUSO251	Rural Sociology	2	-	2	Department Requirement
	ENGL201	English Language 2	2	-	2	University Requirement

Year/Level	Course Code	Course Name	theoretical	practical	Credit	Course Type
2024 – 2023 Therd Class First semester (Fall)	MAET385	Macro Economic theory 1	2	3	3.5	Department Requirement
	MAET386	Principles of Accounting	2	3	3.5	Department Requirement
	AGCR387	Agriculture Credit	2	3	3.5	Department Requirement
	AGMA442	Agricultural Marketing	2	3	3.5	Department Requirement
	REME388	Research Methods	1	3	2.5	Department Requirement
	ECAP389	Econometrics of Agricultural Production	2	3	3.5	Department Requirement
Year/Level	Course Code	Course Name	theoretical	practical	Credit	Course Type
2024 – 2023 Therd Class Second semester (siping)	MAET390	Macro Economics theory 2	2	3	3.5	Department Requirement
	AGAC391	Agricultural Accounting	2	3	3.5	Department Requirement
	AGCO392	Agriculture Cooperation	2	3	3.5	Department Requirement
	FAWM393	Farms works Management	2	3	3.5	Department Requirement
	OPRE394	Operation Research	2	-	2	Department Requirement
	ENEC395	Environmental Economics	-	3	1.5	Department Requirement

Year/Level	Course Code	Course Name	theoretical	practical	Credit	Course Type
2024 – 2023 Fourth Class First semester (Fall)	ECNM486	Econometrics 1	2	3	3.5	Department Requirement
	AGPE487	Agricultural Project Evaluation 1	2	3	3.5	Department Requirement
	AGDE488	Agricultural Development	3	-	3	Department Requirement
	AGPO489	Agricultural Policy	3	-	3	Department Requirement
	REEC490	Resource Economics	2	3	3.5	Department Requirement
	INTR491	International Trade	2	3	3.5	Department Requirement
	REPR402	Research Project 1	-	3	1.5	University Requirement
Year/Level	Course Code	Course Name	theoretical	practical	Credit	Course Type
2024 – 2023 Fourth Class Second semester (spring)	ECNM492	Econometrics 2	2	3	3.5	Department Requirement
	AGPE493	Agricultural Project Evaluation 2	2	3	3.5	Department Requirement
	AGUR494	Agriculture planning	3	-	3	Department Requirement
	WOEC495	Work Economic	3	-	3	Department Requirement
	PRAN496	Prices Analysis	2	3	3.5	Department Requirement
	SEM404	Seminar	1	-	1	University Requirement
	REPR403	Research Project 2	-	3	1.5	University Requirement

8. Expected learning outcomes of the program

Code	Knowledge
A1	The student must be able to demonstrate sound knowledge and understanding of the Arabic language, teach it, develop it, and generalize its use as a scientific and educational language in various scientific and cognitive fields.
A3	The student should be able to explain the principles of human rights and democracy and their role in achieving effective partnership with all segments of society.
A4	The student must be able to demonstrate sound knowledge and understanding of the English language, teach it, disseminate it, develop it, and use it for scientific and educational purposes in various scientific and cognitive fields.
A13	The student should be able to identify the various scientific channels for developing resources, facilities and agricultural sectors
A 15	The student should be able to explain the principles of planning and implementing agricultural operations and know what the market needs through analyzing supply and demand prices
A 18	The student should be able to compare what the market needs by analyzing supply and demand prices
A19	The student should be able to explain the relationship of macro and microeconomics and statistics to agricultural production
A33	The student should be able to define the principles of planning and implementing agricultural and industrial operations to produce safe, high-quality foods.
A35	The student should be able to explain the foundations of manufacturing and preserving food products and the properties and uses of food packaging materials
A40	The student should be able to explain the principles and theories of basic sciences related to agriculture, food, and rural development
A43	The student should be able to demonstrate soil and water management methods and appropriate agricultural practices for field crops and pastures that preserve them and prevent their deterioration.
A 49	The student should be able to explain the principles of planning and implementing agricultural operations in a way that serves livestock in the productive and economic aspects of different agricultural communities and their relationship to sustainable development.
A55	The student should be able to classify horticultural crops according to their botanical and horticultural characteristics and uses.
A64	The student should be able to understand the management, ownership, organization, human resources and legal aspects of forest management institutions

Skills	
Code	Skills
B3	The student should be able to discuss and evaluate studies and research related to societal issues in a systematic and objective manner
B4	The student should be able to propose commercial production plans for plant, animal and food crops in accordance with market systems by assessing the economic situation of the market and knowing its needs.
B8	The student should be able to evaluate the economic situation of the market by solving agricultural problems and knowing its needs
B9	The student should be able to suggest methods for analyzing data and information and interpreting agricultural phenomena using applied programs to solve agricultural problems
B13	The student should be able to analyze with a scientific methodology data and information related to agricultural problems to find the most appropriate solutions
B14	The student should be able to plan and manage agricultural projects free of diseases and pests in accordance with quality and safety standards.
B15	The student should be able to manage agricultural projects in accordance with quality and safety standards and free of diseases and pests
B19	The student should be able to design appropriate production plans and irrigation projects to achieve food and water security and serve the goals of sustainable development
B24	The student should be able to analyze evaluation data and information and not use it in decision-making for continued quality improvement and appropriate intervention
B30	The student should be able to classify the social and economic factors that achieve the technical and economic efficiency of the agricultural facility.
B31	The student should be able to propose plans for planting field crops and developing pastures according to environmental conditions and the quality of soil and water.
B36	The student should be able to analyze the problems and issues of animal and fish production and devise solutions for each problem
B39	The student should be able to choose the best proposed alternatives to solve an agricultural problem to achieve the maximum efficiency of the agricultural facility and exploit the available natural resources to reach sustainable agricultural development.
B43	The student should be able to employ the systematic scientific method in making appropriate decisions to solve various horticultural problems
B46	The student should be able to diagnose the problems of agricultural production and mechanization of small holdings and propose appropriate solutions to them
B47	The student must be able to solve problems using arithmetic, algebraic, geometric, statistical, or mathematical methods.

Professional (practical) skills.	
Code	Professional (practical) skills.
C3	The student must be able to prepare scientific research and studies in his field of specialization in Arabic and English
C4	The student should be able to carry out a feasibility study for agricultural projects using multiple programs
C5	The student should be able to exercise his patriotic and national role through the process of peaceful coexistence
C9	The student will be able to carry out applied research and use statistical programs in experimental design and data analysis in the field of food and nutrition research.
C13	The student will be able to plan economically feasible productive activities to raise the efficiency of agricultural production
C14	The student should be able to apply the principles of environmental economics and econometrics in agricultural projects.
C15	The student should be able to apply the principles of econometrics in agricultural projects within the framework of international trade.
C16	The student should be able to collect data related to agricultural phenomena and problems.
C19	The student should be able to use agricultural resources in an optimal way by implementing economically feasible productive activities to raise production efficiency and achieve sustainable agricultural development.
C36	The student should be able to use agricultural fertilizers and pesticides in an appropriate quantity and with high quality and apply the appropriate use system for them
C37	The student should be able to prepare the initial budget for agricultural projects and activities.
C38	The student should be able to conduct statistical and economic analysis of the local market to plan and develop the agricultural sector
C45	The student should be able to manage field crop production operations under drought conditions, rain-fed agriculture, and irrigated agricultural systems using modern technologies.
C48	The student should be able to use agricultural resources in an optimal way in the livestock and fisheries sector and benefit from investment projects to reach sustainable agricultural development.
C49	The student should be able to apply modern technology related to agricultural operations, food production, and management of livestock and fish farms to implement good scientific research for genetic improvement, production, and preservation of genetic assets.
C52	The student should be able to successfully use agricultural resources and apply them in various horticultural techniques to produce, improve, trade, store and market various horticultural crops.
C57	The student should be able to apply basic methods and applications of mathematics, linear programming, and statistics to analyze and solve problems related to forest sciences.
C60	The student will be able to use computers and other technologies to communicate, measure, analyze, and solve problems related to forest sciences.

Communication and information technology skills	
Code	Communication and information technology skills
D1	The student should be able to use computer programs to analyze and present data and information in the agricultural field
D2	The student should be able to participate effectively in consolidating the concepts of coexistence, a culture of tolerance and pluralism in practice and application.
D3	The student must be able to communicate fluently and effectively in Arabic and English in his field of specialization
D5	The student should be able to acquire the skills of planning, organizing, managing and organizing time, and leading groups in a satisfactory manner
D7	The student should be able to work with his colleagues in a team spirit, and be able to communicate with others
D9	The student should be able to be proficient in self-learning, writing reports, and working within the agricultural team
D11	The student should be able to master methods of problem solving and time management in the agricultural and extension fields
D14	The student should be able to keep pace with the requirements of the labor market through familiarity with recent developments in the field of food science and human nutrition.
D23	The student should be able to possess knowledge of general agricultural issues at the national and global levels
D24	The student should be able to interpret quantitative information from formulas, graphs, tables, plans, simulations, and visualizations, draw conclusions from that information, and represent it symbolically, visually, and numerically.

Ethics	
Code	Ethics
E3	The student should be able to deal efficiently and effectively in the field of work to transfer knowledge and skills to farmers and the general public
E4	The student should be able to contribute to spreading awareness among farmers and community members to reduce the use of agricultural pollutants
E5	The student must be able to bear responsibility for completing work efficiently and be keen on professional ethics

9. Teaching and Learning Strategies

- ✓ Developing curricula in coordination with the senior departments related to the department.
- ✓ Developing curricula by the department that are similar to the environment of the community that the department serves.
- ✓ Sending students to agricultural departments, agricultural directorates, or departments related to the department's specializations for the purpose of conducting summer application.

10. Evaluation methods

- ✓ Easy liquidity during the application period to learn from them the extent of their understanding of the nature of the work that was practiced during the application period.
- ✓ Discuss classroom research discussion of students' choices in courses.
- ✓ Writing reports after completing the application period to determine the students' ability to diagnose problems and find solutions to them.

11. Faculty

Faculty Members

Academic Rank	Specialization		Special Requirements/Skills (if applicable)		Number of the teaching staff	
	General	Special			Staff	Lecturer
Professor	--	2			2	
Assistant Professor	--	5			5	
Lecturer	--	9			9	
Assistant Lecturer	--	5			5	

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 and 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 Agricultural Economics, which are 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 scientific committee in the department, the department council, and 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, analyzing data from the questionnaires of the questionnaires committee in the college, and evaluation reports of the examination questions 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

