



Form: Study Plan- Bachelors	Form Number	EXC-01-03-02A
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	The Date of the Deans Council Approval Decision	26/12/2023
	Number of Pages	08

1.	School	Agriculture
2.	Department	Agricultural Economics and Agribusiness Management Dept.
3.	Program title (Arabic)	بكالوريوس الاقتصاد الزراعي وإدارة الأعمال الزراعية
4.	Program title (English)	B.Sc. degree in Agricultural Economics and Agribusiness Management

5. Components of Curriculum:

The curriculum for the bachelor's degree in Agricultural Economics and Agribusiness Management consists of (138) credit hours distributed as follows

Number	Type of requirement	credit hours
First	University Requirements	27
Second	Faculty Requirements	21
Third	Department Requirements	74
forth	practical training	16
Total		138



6. Numbering System:

A- Department number

Department	Number
Plant Production Technology	1
Animal Production	2
Nutrition and Food Technology	3
Land, Water and Environment	4
Agricultural Economics and Agribusiness Management	5
Plant Protection	6

B- Course number

Domain title	Domain number	Domain title	Domain number
General	0	Policy and Development	4
Economic Theory	1	Quantitative Analysis	5
Agribusiness	2	Extension and Rural Development	6
Marketing and Agricultural Trade	3	Training, Research and Seminars	9

C- Course number consists of 7 digits Example: Principles of Agricultural Economics (0605101)

Serial number		Level	Department		School	
0	1	1	0	5	0	6

First: University Requirements:

Compulsory Requirements					
(18 Credit Hours)					
No.	Course Title	Course No.	Credit Hours	Prerequisites	Notes
1	Military Science	2220100	3		
2	National Culture	3400100	3		
3	Learning & Research Skills	3400101	3	3202099	
				3201099	



				1932099	
4	Communication Skills	3400102	3	3400101	
5	Introduction to Philosophy and Critical Thinking	3400103	3	3400101	
6	Human Civilization	3400104	3		
7	Campus Life and Ethics	3400105	(Zero credit; one-hour weekly meeting)		



Preparation Program Requirements

All students admitted to the university must apply for a degree examination in Arabic and English and the computer is prepared or approved by the university to determine their level. Based on the results of the examinations, either the student will study one or more of the requirements of the preparatory program

(0 - 15 Credit Hours)

No.	Course Title	Course No.	Credit Hours	Prerequisites	Notes
1	Basics of Arabic	3201099	3		Pass/Fail
2	Arabic Languages Skills	3201100	3	3201099	Pass/Fail
3	Basics of English	3202099	3		Pass/Fail
4	English Language Skills	3202100	3	3202099	Pass/Fail
5	Basics of Computing	1932099	3		Pass/Fail

Preparation Program Requirements

All students admitted to the university must apply for a degree examination in Arabic and English and the computer is prepared or approved by the university to determine their level. Based on the results of the examinations, either the student will study one or more of the requirements of the preparatory program

(0 - 15 Credit Hours)

No.	Course Title	Course No.	Credit Hours	Prerequisites	Notes
1	Basics of Arabic	3201099	3		Pass/Fail
2	Arabic Languages Skills	3201100	3	3201099	Pass/Fail
3	Basics of English	3202099	3		Pass/Fail
4	English Language Skills	3202100	3	3202099	Pass/Fail
5	Basics of Computing	1932099	3		Pass/Fail



Electives					
(9 Credit Hours)					
Elective courses: (9) credit hours to be chosen from the first, second and third groups mentioned below. The student has to choose one course from each of the groups.					
(First Group)					
No.	Course Title	Course No.	Credit Hours	Prerequisites	Notes
1	Great Books	3400107	3		
2	Islam and Current Issues	0400101	3		
3	Arab-Islamic Civilization	2300101	3		
4	Jordan: History and Civilization	2300102	3		
5	Jerusalem	3400108	3		
Electives					
(Second Group)					
No.	Course Title	Course No.	Credit Hours	Prerequisites	Notes
1	Legal Culture	1000102	3		
2	Environmental Culture	0300102	3		
3	Physical Fitness Culture	1100100	3		
4	Islamic Culture	0400102	3		
5	Health Culture	0720100	3		
Electives					
(Third Group)					
No.	Course Title	Course No.	Credit Hours	Prerequisites	Notes
1	Entrepreneurship & Creativity	3400109	3		



2	Foreign Language	2200103	3		
3	Electronic Commerce	1600100	3		
4	Social Media	1900101	3		
5	Appreciation of Arts	2000100	3		
6	Special Subject	3400106	3		
7	Administrative skills	1601105	3		

Second: School courses: distributed as follows:

- A. Obligatory school courses: (21) credit hours
 B. Elective school courses: (0) credit hours

A. Obligatory school courses: (21) credit hours:

Course Number	Course Title	Contact Hours		Credit Hours	Pre-requisite
		Theoretical	Practical		
0301101	Calculus (1)	3	-	3	-
0303101	General chemistry (1)	3	-	3	-
0304101	General life sciences (1)	3	-	3	-
0304111	Experimental general life sciences 1	-	3	1	0304101 or Sim
0333109	Experimental general chemistry for non-chemistry students	-	3	1	0303101 or Sim
0342103	General physics for life sciences students	3	-	3	-
0332113	Experimental physics for life sciences	-	3	1	0342103 or Sim
0661101	Principles of plant production	3	-	3	0304101
1942102	Computer skills for humans Schools	3	-	3	1932099 1902098

- B. Elective school courses: (0) credit hours:

Third: Specialty courses: (90) credit hours distributed as follows:



- A. Obligatory specialty courses: (53) credit hours
 B. Elective specialty courses: (18) credit hours
 C. Specialized practical and practical training and job preparation (19)) credit hours

A. Obligatory specialty courses: (53) credit hours:

Course Number	Course name	Credit hours		Credit hours	Prerequisites
		Theoretical	Practical		
0601250	Principle of farm machinery	3	-	3	0342103
0602101	Principles of Animal Production	3	-	3	0304101
0604101	Principles of Soil	3	-	3	033310+0301019
0605101	Principles of Agricultural Economics	3	-	3	0301101
0605150	Agricultural Statistics	3	-	3	0301101
0605215	Macroeconomics for Agriculture	3	-	3	0605101
0605216	Agricultural Price Analysis	3	-	3	0605101
0635220	Farm Management	3	-	3	0605101
0645222	Agribusiness Management (1)	3	-	3	0605101
0635230	Agribusiness Marketing	3	-	3	0605101
0605260	Agricultural Extension	3	-	3	-
0635310	Agricultural Production Economics	3	-	3	0605101
0635325	Agribusiness Finance and Accounting	3	-	3	0635220
0635328	Agribusiness Projects Analysis	3	-	3	0635220
0645333	International Agricultural Trade	2	-	2	0605215
0635450	Econometrics	3	-	3	0605150
0605458	Operational Research in Agriculture	3	-	3	0635220
0606101	Principles of Plant Protection	3	-	3	0304101

B. Elective specialty courses: (18) credit hours:

Course Number	Course name	Credit hours		Credit hours	Prerequisites
		Theoretical	Practical		
0601210	Basics of Fruit Trees	2	3	3	0661101
0601220	Olericulture	2	3	3	0661101
0605429	Food product production management	3	-	3	
0601441	Harvesting, Handling and Storage of Crops	2	3	3	0661101
0602212	Poultry Production	2	3	3	0602101



0604103	Principles of Irrigation	3	-	3	0301101
0605326	Agribusiness Management (2)	3	-	3	0645222
0635327	Agribusiness Cooperatives	3	-	3	0645222
0635340	Agricultural Policies and Development	3	-	3	0605215
0635360	Rural Development	3	-	3	0605260
0605428	Agribusiness Risk Management	3	-	3	0605260
0635440	Arab Agriculture and Food Security	3	-	3	0605215
0605445	Environmental Economics	3	-	3	0635328
0605455	Agricultural Economic Analysis	3	-	3	0605216
0605465	Communication Methods and Technology Transfer	3	-	3	0605260
0603101	Principles of Food and Nutrition	3	-	3	0304101

Fourth: Practical training, job preparation, and specialized practical are (19) credit hours distributed as follows:

Course Number	Course name	Credit hours		Credit hours	Prerequisites
		Theoretical	Practical		
0641499	Field training in horticulture and crops	-	8	2	*0661101
0645499	Field training in agricultural economics and agribusiness management	-	8	2	*0605101
0646499	Field training in plant protection	-	8	2	*0606101
0651495	Field training in agricultural mechanization	-	8	2	*0601250
0652499	Field training in animal production	-	8	2	*0602101
0654499	Field training in land, water and environment	-	8	2	*0604101
0662490	Fundamentals of employment readiness (interpersonal skills and professional development)	-	6	3	(**)
0615491	employment readiness - specialized skills in agricultural economics and agricultural business management	-	6	3	(**)
0605492	specialized practical in agricultural economics and agribusiness management			1	*

(*) To pass successfully 110 credit hours with department approval.

(**) To pass successfully 89 credit hours with department approval.

Fourth: Courses offered by other faculties/schools and departments



Course Number	Course Title	Contact Hours		Credit Hours	Pre-requisite
		Theoretical	Practical		
0301101	Calculus (1)	3	-	3	-
0303101	General chemistry (1)	3	-	3	-
0304101	General life sciences (1)	3	-	3	-
0304111	Experimental general life sciences 1	-	3	1	or Sim 0304101
0333109	Experimental general chemistry for non-chemistry students	-	3	1	or Sim 0303101
0342103	General physics for life sciences students	3	-	3	-
0332113	Experimental physics for life sciences	-	3	1	or Sim0342103
0661101	Principles of plant production	3	-	3	0304101
0606101	Principles of Plant Protection	3	-	3	0304101
0604103	Principles of Irrigation	3	-	3	0301101
0602101	Principles of Animal Production	3	-	3	0304101
0602212	Poultry Production	2	3	3	0602101
0603101	Principles of Human Nutrition and Food Science	3	-	3	0334103
0601210	Basics of Fruit Trees	3	-	3	0661101
0601220	Olericulture	3	-	3	0661101
1942102	Computer skills for humans Schools	3	-	3	1932099 1902098
0601441	Harvesting, Handling and Storage of Crops	2	3	3	0661101
0604101	Principles of Soil	3	-	3	0333109+0303101

**Fifth: Advisory Study Plan**

(First) Year

(first) Semester			(second) Semester		
Course Number	Course Title	Credit Hours	Course Number	Course Title	Credit Hours
0301101	Calculus (1)	3	0342103	General Physics for Life Sciences	3
0303101	General chemistry (1)	3	0605101	Principles of Agricultural Economics	3
0304101	General life sciences (1)	3	-	Elective University	3
0304111	Experimental general life sciences 1	1	1931102	Computer Skills (Scientific Schools)	3
-	Elective University	3	0332113	Experimental physics for life sciences	1
0303109	Experimental General Chemistry	1	-	Elective University	3
Total		14	Total		16
(Summer) Semester			-	Elective University	3
Total Summer Semester		3	Total for first year		33

(second) Year

(first) Semester			(second) Semester		
Course Number	Course Title	Credit Hours	Course Number	Course Title	Credit Hours
0605220	farm Management	3	0605215	Macroeconomics for Agriculture	3
0661101	Principles of plant production	3	0606101	Principles of Plant Protection	3
0602101	Principles of Animal Production	3	0604101	Principles of Soil	3
0605150	Agricultural Statistics	3	0601250	Principle of farm machinery	3
-	elective speciality course	3	0605222	Agribusiness Management (1)	3



			0605260	Agricultural Extension	3
Total		15	Total		18
(Summer) Semester				Elective University	3
Total Summer Semester		3	Total for first year		36

Third Year

(first) Semester			(second) Semester		
Course Number	Course Title	Credit Hours	Course Number	Course Title	Credit Hours
-	Elective University	3	0635230	Agribusiness Marketing	3
-	elective speciality course	3	0645333	International Agricultural Trade	2
0635310	Agricultural Production Economics	3	0635328	Agribusiness Projects Analysis	3
0635325	Agribusiness Finance and Accounting	3	-	Elective University	3
0605216	Agricultural Price Analysis	3	-	elective speciality course	3
			-	elective speciality course	3
Total		15	Total		17
(Summer) Semester			-	elective speciality course	3
Total Summer Semester		3	Total for first year		35

Fourth Year

(first) Semester			(second) Semester		
Course Number	Course Title	Credit Hours	Course Number	Course Title	Credit Hours
0635450	Econometrics	3	0641499	Field training in horticulture and crops	2
0605458	Operational Research in Agriculture	3	0645499	Field training in agricultural economics and agribusiness management	2



-	elective speciality course	3	0646499	Field training in plant protection	2
-	Elective University	3	0651495	Field training in agricultural mechanization	2
-	Elective University	3	0652499	Field training in animal production	2
			0654499	Field training in land, water and environment	2
			0605492	specialized practical in agricultural economics and agribusiness management	1
			0662490	Fundamentals of employment readiness (interpersonal skills and professional development)	3
			0615491	employment readiness - specialized skills in agricultural economics and agricultural business management	3
Total		15	Total		19
(Summer) Semester					
Total Summer Semester			Total for first year		24

Course Description

0301101	Calculus (1)	Credit hours: 3
Prerequisite:		
<p>Functions: domain, operations on functions, graphs of functions; trigonometric functions; limits: meaning of a limit, computational techniques, limits at infinity, infinite limits; continuity; limits and continuity of trigonometric functions; the derivative: techniques of differentiation, derivatives of trigonometric functions; the chain rule; implicit differentiation; differentials; Roll's Theorem; the mean value theorem; the extended mean value theorem; L'Hopital's rule; increasing and decreasing functions; concavity; maximum and minimum values of a function; graphs of functions including rational functions (asymptotes) and functions with vertical tangents (cusps); antiderivatives; the indefinite integral; the definite integral; the fundamental theorem of calculus ; the area under a curve; the area between two curves; transcendental functions: inverse functions, logarithmic and exponential functions; derivatives and integrals; limits (the indeterminate forms); hyperbolic functions and their inverses; inverse</p>		



trigonometric functions.		
0303101	General chemistry (1)	Credit hours: 3
Prerequisite: -		
Measurements and significant figures, chemical reactions; stoichiometry; the gaseous state; thermochemistry; electronic structure and periodicity; chemical bonding; molecular shapes; states of matter and intermolecular forces.		
0304101	General life sciences (1)	Credit hours: 3
Prerequisite: -		
Internal structure of the cell, molecules of the cell, metabolism, respiration and photosynthesis, cell-cell signaling, cell division, Mendelian inheritance, molecular biology of the gene, DNA technology, chemical signals in plants and animals, phylogeny and systematic introduction to ecosystems.		
0304111	Experimental General Biology (1)	Credit hours: 1
Prerequisite: 0304101 or concurrent		
Laboratory experiments in microscopy and cells, chemical aspects of cells, plant and animal tissues, animal and plant physiology. Mammalian anatomy, and systematic of major living groups.		
0333109	Experimental General Chemistry	Credit hours: 1
Prerequisite: 0303101 or concurrent		
Selected experiments representing the following subjects in general chemistry: tools and measurements, empirical formula, limiting reagent, acid-base reactions, oxidation reduction reactions, thermodynamics, common ion effect.		
0342103	General Physics for Life Sciences	Credit hours: 3
Prerequisite: -		
Motion in a straight line, motion in two dimensions, newton's laws of motion, statics, work, energy, and power, linear momentum, temperature and the behaviour of gases, thermodynamics, thermal properties of matter, electric forces, electric fields, electric potentials, direct currents.		
0605150	Agricultural Statistics	Credit hours: 3
Prerequisite: 0301101		
Descriptive statistics, data presentation, measures of central tendency, measures of dispersion, probability theory, probability distributions, sample distribution, estimation, hypothesis testing, t-test, analysis of variance, chi-square, correlation and simple regression.		
0661101	Principles of Plant Production	Credit hours: 3



Prerequisite: 0304101		
This course deals with the importance of the plant production systems in achieving global food security. Major horticultural and field crops, their divisions, composition, growth, development, reproduction, and their appropriate environment for cultivation. An overview of major production practices, propagation, mineral nutrition, breeding and pruning, growth and development regulation and plant production systems for major agricultural crops.		
0602101	Principles of Animal Production	Credit hours: 3
Prerequisite: 0304101		
Introduction to farm animals' and livestock sector with special emphasis on cattle, sheep, goats and breeds poultry. Products of farm animals (meat, milk, eggs, wool), basic concepts in genetic improvement, reproductive and digestive systems, nutrients and their functions, husbandry of farm animals.		
0605101	Principles of Agricultural Economics	Credit hours: 3
Prerequisite: 0301101		
Analysis of input-output, input-input, economic concepts, resources and systems, and output-output relationships. Analysis of costs of production, input and output decisions of agricultural firms, demand and supply and their related elasticity, market equilibrium, determination of prices and quantities, and types of markets. Basic agricultural economic concepts concerning resource use, price determination, and profit maximization are emphasized.		
0605215	Macroeconomics for Agriculture	Credit hours: 3
Prerequisite: 0605101		
Economic efficiency and full employment of resources, aggregate supply and demand, national income accounting, significance of the agricultural sector share of Gross Domestic Product (GDP), determining of GDP, consumption, investment, government expenditures and taxes, fiscal policy, money, banking and monetary policy, inflation, unemployment, foreign trade, balance of payments, and economic growth..		
0605216	Agricultural Price Analysis	Credit hours: 3
Prerequisite: 0605101		
Price theory and techniques for predicting price behaviour of general economy and price behaviour of individual agricultural products will be analyzed. Role of prices in the economic system, market structure, demand and supply of agricultural products, elasticity, market prices, price index numbers, and time-series analysis. An analysis of the factors affecting the prices of agricultural products and a study of the behaviour of these prices, seasonal and cyclical price movement; government activities relating to agricultural prices, marketing margins and prices paid. It provides practice in the application of economics and statistics to agricultural price analysis..		
0645222	Agribusiness Management (1)	Credit hours: 3



Prerequisite: 0605101		
Agribusiness sector, concepts of management and the organizer in business management, management theories, and the decision-making process. The course focuses on the application of management functions in the operation of agribusiness organizations; Planning, organizing, directing, coordinating, and controlling. The course focuses on preparing market plans, setting operational budgets, cash flows, and capital, the organizational structure of the organization, choosing the legal form of the organization, financial statements, human relations, and managing and motivating individuals. The course includes case studies to train students on communication skills and decision-making in agricultural business		
0635230	Agribusiness Marketing	Credit hours: 3
Prerequisite: 0605101		
Concept and functions of agribusiness marketing as it applies to the marketing of unprocessed and semi-processed agricultural products, methods of price determination, estimation of marketing margins, marketing channels, factors affecting prices, marketing channels, and marketing environment, marketing organizations, and methods of conducting marketing research.. The course presents to students various merchandising activities that affect the sale of food products through the food marketing system and that occur in the retail store.		
0605260	Agricultural Extension	Credit hours: 3
Prerequisite:		
Development, objectives, philosophy of agricultural extension, and role of extension in the process of agricultural and rural development and factors affecting its effectiveness are explored. Communication process, extension methods, dissemination and adoption process, planning and evaluation of extension programs, systems and approaches of extension, and development of agricultural extension in Jordan are covered.		
0635310	Agricultural Production Economics	Credit hours: 3
Prerequisite: 0605101		
Applications of economic principles to problems of agricultural production. Analysis of production functions, cost functions and their uses in determining optimal quantities of production inputs and outputs. Economically efficient and profit maximizing output, economies of size and scale, elasticity of substitution, demand functions for inputs, the impact of new technology on production, cost, and profit function, and decision-making through time and under risk and uncertainty		
0635325	Agribusiness Finance and Accounting	Credit hours: 3
Prerequisite: 0635220		
Study of the concepts of agricultural finance and accounting, financial intermediation. Capital and credit needs of farms and agribusiness firms. Methods and procedures whereby agricultural firms acquire and utilize funds required for their successful operation. Emphasis is placed upon role of finance and financial		



planning, investment and loan appraisal, rate of interest, financial management, farm accounting system for the management and operation of agricultural firms, and financial performance analysis		
0635328	Agribusiness Projects Analysis	Credit hours: 3
Prerequisite: 0635220		
The course examines the role of agricultural and agro-based industries projects in development, and aims at empowerment of students in project evaluation skills. Costs and benefits with and without the project are identified. Financial and economic analyses of technically sound agribusiness cultural projects are conducted using the main discounting techniques. Social, environmental and sensitivity analyses are integral components of the feasibility study. Students are trained to conduct feasibility studies using PC software.		
0635340	Agricultural Policies and Development	Credit hours: 3
Prerequisite: 0605215		
Role of agriculture in the economic development. Objectives of agricultural policies, Policies affecting agriculture, rural areas and agribusiness firms, including fiscal and monetary policies, food marketing, and trade policies are analyzed. The course discusses bases of economic and agricultural development, characteristics, obstacles, sources of finance, allocation theories, development strategies, theories of economic development, and models in agricultural development, agricultural policies and development in Jordan..		
0635360	Rural Development	Credit hours: 3
Prerequisite: 0605260		
Concepts of society, culture, social change, rural societies, the socio-cultural characteristics, features of underdevelopment, constraints, and incentives. Theories, dimensions and fields of rural development, role of extension, planning, implementation and evaluation of rural development programs, review of case studies of rural development in Jordan and selected countries		
0605428	Agribusiness Risk Management	Credit hours: 3
Prerequisite: 0635220		
Various source of risk inherent in agricultural and agribusiness firms. Classical risk theories and their current applications in agricultural production and farm management issues will be introduced. Concepts of risk and uncertainty, trade-off between risk and income, subjective and objective measures of risk, decision matrix and decision tree, simple decision rules, expected utility theory, mean-variance analysis, firm's decision under uncertainty, and production decision under risk. Risk reducing strategies such diversification, future markets, hedging and insurance will be introduced with practical problems of the real world.		
0605429	Production and marketing management of food products	Credit hours: 3



Prerequisite:0645222		
This course aims to introduce students to modern methods and how to make decisions related to managing the optimal production of agricultural goods and services, as well as studying the factors that affect the institutions concerned with the production of food goods, procurement, distribution and the necessary requirements for developing the production processes of food goods and services. The course also aims to identify the principles General marketing of food products, scientific marketing research, consumer behavior and marketing strategies		
0635220	farm Management	Credit hours: 3
Prerequisite:0605101		
Principles and applications of the scientific method for making decisions related to allocating resources to manage and organize the profitable operation of a farm business, analyzing basic farm constraints and using the resulting information in farm financial planning and management activities. The course focuses on the applications of economic principles in the decision-making process, preparing budgets, uses of linear programming as a planning tool, analysis of investment activities, and financial control tools, especially the balance sheet and profit and loss statement. The courses include practical exercises on the applications of economic principles in addressing specific problems in farm management		
0605445	Environmental economics	Credit hours: 3
Prerequisite:0635328		
Economic issues related to the agricultural environment and environmental policies. Employing microeconomic tools to analyze external economies, societal well-being, public goods, property rights, dysfunctional performance of market economies, and analysis of social benefits and costs. Environmental assessment, its justifications, and methods using market prices, changes in production capacity and the ability to generate income, opportunity costs, and the replacement approach and preventive costs. Economic incentives for environmental protection and the economics of sustainable development.		
0635450	Econometrics	Credit hours: 3
Prerequisite: 0605150		
Use of economic theory and statistical methods to estimate economic models to enhance agribusiness decision-making is the focus. Concepts of simple and multiple regression and their related tests of significance of parameter estimates are presented. Econometric issues of functional form, relevant variables, predictive performance, model diagnostics, and major estimation problems in regression are examined. Non-parametric statistics, matrices, the related calculations and the related statistical tests are examined. Applications of techniques to agricultural economics and agribusiness problems are used..		
0605455	Agricultural Economic Analysis	Credit hours: 3
Prerequisite: 0605216		
Basic mathematical methods and their applications to micro and macro economics: elementary		



techniques in algebra, matrices, single and multivariable calculus, unconstrained and constrained optimization, applications of calculus to economics, comparative static analysis, equilibrium and comparative analysis.

0605458	Operational Research in Agriculture	Credit hours: 3
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Prerequisite: 0635220

Applications of mathematical programming to agribusiness decision problems. Introduction to linear programming, sensitivity analysis and interpretation of results. Linear-programming application in the use of resources in farm and agribusiness production and marketing. Simplex-based sensitivity and duality, post optimality analysis, transportation models and computer applications are covered.

0635441	Food Security	Credit hours: 3
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Prerequisite: 0605215

The Arab agriculture, land and water resources, land use and the production pattern in the Arab countries, agricultural policies, the share of agriculture in GDP and employment and the development of their relative importance. Describe and analyze interdependencies between the Arab agriculture and integration in economic development, the Arab free trade area, and intra-Arab agricultural trade, total and agricultural trade balance and food gap in Arab countries. Strategic components and approaches of food security, policies and tools of nutrition and food security, integrated food plan, food balance sheet, principles of food self-reliance, global food security, food security in the Arab countries and in Jordan..

0605326	Agribusiness Management (2)	Credit hours: 3
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Prerequisite:0645222

Concepts and issues related to the preparation of business and market plans, marketing in agricultural business management, ratio and trend analysis of financial statements, quality assurance systems, and human resource management. Case studies on contemporary issues related to agricultural business to apply the scientific method in addressing problems and train students to carry out group activities and present their ideas and concepts orally and in the form of scientific reports.

0606101	Principles of Plant Protection	Credit hours: 3
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Prerequisite: 0304101

This course is designed to familiarize the student with the principles of plant protection. It will focus on the basic aspects of entomology and plant pathology.

0645499	Field training in agricultural economics and agribusiness management	Credit hours: 2
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0605101 and successfully pass 110 credit hours

This course includes practical training for students in the fields of farm management, preparing budgets and financial analysis for investment activities in agricultural businesses, applying economic, statistical



and mathematical principles and planning and administrative control tools in analyzing farm data.		
0605492	specialized practical in agricultural economics and agribusiness management	Credit hours: 1
Prerequisite: 0605101 and successfully pass 110 credit hours		
Practical training in the fields of farm management, preparing budgets and financial analysis for investment activities in agricultural business, applying economic, statistical and mathematical principles and planning and administrative control tools in analyzing farm data. The student is also trained to collect information on a specific topic in the field of specialization from various sources on topics related to agricultural economics and agricultural business management. Designing and conducting research and presenting the results on scientific grounds. Students presenting the research prepared and discussed by the course students		
0635327	Agribusiness Cooperatives	Credit hours: 3
Prerequisite: 0645222		
The course explores the functioning, management of agribusiness cooperatives. Role and potential contribution of cooperatives in agricultural and rural development by solving problems in production and marketing of agribusiness products. The course presents an analysis of the principles of cooperation, differences between cooperatives and non-cooperative corporations, objectives, classification, structure, sources of finance, steps of organization, administration, and factors behind the success of cooperatives and the development of the cooperative movement in Jordan.		
0605465	Communication Methods and Technology Transfer	Credit hours: 3
Prerequisite: 0605260		
The diffusion of information and the innovation adoption process, communication concepts, skills, patterns, and effective communication process. Extension teaching methods used in Information, technology transfer to extension clientele, types, advantages and disadvantages of individual, group and mass media methods of extension are examined. The course explores theoretical models of program development, needs assessment and analyzing and interpreting program priorities, and resources needed to design, organize, and conduct extension education programs and activities for targeted audiences are explored		
0645333	International agricultural trade	Credit hours: 2
Prerequisite: 0605215		
A general presentation of international trade theories, agricultural trade policies and their impact on the welfare of society, trade barriers related to customs tariffs, and through the quota system and regulatory procedures, trade policies and their impact on agriculture, and agricultural policies and their impact on trade, preferential trade agreements; Free trade area, customs union, common market, economic and monetary union, multilateral trade negotiations under the General Agreement on Trade and Tariffs, and the World Trade Organization. The course addresses the macroeconomic impact on global trade, the		



exchange rate, trade and the environment, agricultural trade liberalization and its impact on Jordanian agriculture		
6031010	Principles of Human Nutrition and Food Science	Credit hours: 3
Prerequisite: 0304101		
Introduction to the nutrients with respect to classification, dietary sources, functions and body requirements. Concept of balanced diet and the etiology and management of malnutrition. Types and causes of food spoilage, food preservation, and food-borne diseases, emphasizing the status of nutrition and food industries in the region.		
0662490	Fundamentals of employment readiness (interpersonal skills and professional development)	Credit hours: 3
Prerequisite: pass successfully 89 credit hours with department approval		
<p>This course aims to help students acquire the skills, experiences and competencies necessary to successfully enter the labor market and make graduates distinguished in their professional fields and able to solve the problems they face by providing them with the skills and competencies required for the labor market. It will focus on enhancing their technical, professional and personal capabilities.</p> <ul style="list-style-type: none"> • The material includes a description of the labor market in the Kingdom and the region and the jobs available for the academic program • In this course, the student will take a general overview of the work environment in the specialty and the skills and competencies required for the labor market. • The concepts of leadership, creativity, innovation, productivity, administrative hierarchy, and capacity development will be discussed. • In this course, experts will be hosted to give lectures to students in the specialty to discuss the work environment and job requirements in the specialty. <p>Identifying the applicable laws, regulations and legislation related to the profession.</p> <ul style="list-style-type: none"> • Writing a CV, filling out the application for the job and preparing for interviews. • Understanding the requirements of the labor market, the mechanism of searching for a job, and how to search for it on social media • Hosting experts to discuss available opportunities and labor market requirements in the targeted sectors in general and to present successful experiences to them. <p>Case studies and field insights to provide an educational experience that contributes significantly to food security and sustainable agriculture.</p> <ul style="list-style-type: none"> • The material presents the reality for graduates of the College of Agriculture in general, job opportunities and labor market behavior locally and at the regional level. 		



- The course will address the regulations and legislation generally applicable to licenses and permits for recording materials.
- The student will learn about public and private sector institutions, large and small companies, and the mechanism of interaction between them.
- The student will also learn about the role of international and local bodies and unions and their relationship to the specialty.
- The student will also learn about job opportunities and fields in the specialization and the possibilities available in other fields

0615491	employment readiness (specialized skills in agricultural economics and agricultural business management	Credit hours: 3
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Prerequisite: pass successfully 89 credit hours with department approval

This course aims to provide students with the basic skills and knowledge necessary to pursue career paths in the field of agricultural economics. The course combines theoretical knowledge, practical exercises, current studies, and field insights to provide a comprehensive educational experience that contributes to sustainable agriculture. The main skills covered include: (1) education and training to obtain appropriate education in agricultural business management, farm management and marketing, (2) technical skills that include developing expertise in determining the optimal exploitation of resources, preparing budgets, and determining economic size to maximize profit. (3) Communication and cooperation by enhancing effective communication skills with colleagues, farmers, researchers and stakeholders, and collaborating with multidisciplinary teams to address risk challenges in the field of agricultural production, (4) Environmental awareness through the environmental impact on the economy, (5) Organizational knowledge and that By understanding regulations and policies related to environmental impacts and farm management, identifying import/export requirements and assessing risks, (6) the ability to solve problems and make decisions, and this is by developing critical thinking skills to diagnose problems facing farmers and guidance methods to help farmers and propose effective solutions and enhance opportunities for adaptation. With climate change and emerging threats, (7) Work ethics necessary for success in managing agricultural work. The course will include hosting experts to evaluate the students' mastery of the skills and competencies required for the labor market in the agricultural economics major. At the end of the semester, a graduation project will be submitted that includes collecting data, conducting studies, and presenting the results to experts. An assessment will be made of their readiness for the labor market and the extent of their ability to perform the basic tasks related to the competencies required for the specialization.