



Department of Agricultural Economics & Agribusiness Management

Course Weekly Hours

No. Course Title Lec. Lab.

Credit

Hours

Pre requisite

General (0)

**0605101 Principles of Agricultural
Economics 3 - 3 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 elasticities,

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.

(1) Economic Theory

605215 Macroeconomics for

Agriculture 3 - 3 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.



6106052 Agricultural Price Analysis
3 - 3 0605101

Price theory and techniques for predicting price behavior of general economy and price behavior of individual agricultural products will be analyzed. Role of prices in the economic system, market structure, demand and supply of agricultural products, elasticities, market prices, price index numbers, and timeseries analysis. An analysis of the factors affecting the prices of agricultural products and a study of the behavior 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.

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0106053 Agricultural Production
Economics 3 - 3 0605101

Applications of economic principles to problems of agricultural production. functions and their uses in determining Analysis of production functions, cost 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.



**(2) Agribusiness Management
0605220 Farm Management 3 - 3 0605101**

Principles and procedures of decision making as applied to the allocation of resources for the profitable organization and operation of the farm business. The analysis and interpretation of basic farm accounting records and the use of this information in planning future farm decisions and financial management. Emphasis is placed on use of principles of economics and their application to the decision-making process, budgeting techniques, linear programming, and investment analysis, balance sheet, and income statement analysis. Includes exercises on the application of principles to specific farm management problems.

**2220605 Agribusiness Management
(1) 3 - 3 0605101**

Agribusiness system, concepts of entrepreneurship and management, management theory overview, and decision-making process. The course is built around the application of the functions of management, which governs the operation of agribusiness firms; planning, organizing, directing, coordinating, and controlling. Emphasis on marketing plans, operational, cash flow and capital budgeting, organizational structure, choosing a business type, financial statements, human relations, personnel management and motivation and quality control. Case studies are used to teach communication and decision-making in agribusiness management. Skills

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**605325 Agribusiness Finance and
Accounting 3 - 3 0605220**

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.

**0605326 Agribusiness Management
(2) 3 - 3 2220605**

The concepts and issues of formulating business and market plans, marketing in agribusiness, human relations and personnel management, analysis of agribusiness financial statements using ratio and trend analysis, quality control systems; quality assurance and total quality management are covered. Case studies in issues related to agribusiness management will be used throughout the course to build team-working abilities through group activities and oral and written presentation of ideas and concepts.

**0605327 Agribusiness
Cooperatives
3 - 3 2220605**

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.



**605328 Agribusiness Projects
Analysis 3 - 3 0605220**

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.

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**0605428 Agribusiness Risk
Management 3 - 3 0605220**

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, meanvariance

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.



(3) Marketing and Agricultural Trade
605230 Agribusiness Marketing
3 - 3 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.

0605333 International
Agricultural Trade 2 - 2 0605215

Overview of international trade theories, agricultural trade policies and welfare implications, tariffs and quotas barriers to trade, non tariff barriers to trade, trade policies and the effects on agriculture and the effects of agricultural policy on trade, principles and agricultural trade practices, preferential trade agreements, free trade area, customs unions, common market, economic integration, and multilateral trade negotiations: the World Trade Organization (WTO) and General Agreement on Tariffs and Trade (GATT). Macroeconomics and its influence on international trade; exchange rates, trade and the environment, agricultural trade and Jordanian agriculture are covered. Liberalization



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(4) Policy and Development

**3400605 Agricultural Policies and
Development 3 - 3 1506052**

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.

**0406054 Arab Agriculture and Food
Security 3 - 3 1506052**

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.



4450605 Environmental Economics 3 - 3 0605328

Economic issues related to the agricultural environment and environmental policy. Microeconomic tools are applied for the analysis of externalities, welfare, public goods, property rights, market failure, and social cost-benefit analysis. Valuation of the environment; rationale, valuation techniques using market prices, productivity changes, changes of earnings, opportunity cost approach, preventive expenditure approach and replacement, economic incentives for environmental protection, and economics of sustainable development.

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(5) Quantitative Analysis

0605150 Agricultural Statistics 3 - 3 0301101

Descriptive statistics, data presentation, measures of central tendency, measures

of dispersion, theory of probability, probability distributions, sampling distributions,

estimation, testing hypotheses; t-test, analysis of variance, and χ^2 test, correlation

and simple regression.

0605450 Econometrics 2 - 2 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.



**5506054 Agricultural Economic
Analysis 3 - 3 0605215**

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 3 - 3 0605220**

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, and computer applications are post optimality analysis, transportation models covered.

**Course Course Title Weekly Hours Credit Pre106
No. Lec. Lab. Hours requisite
(6) Extension and Rural Development
0605260 Agricultural Extension
3 - 3 –**

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.



0605360 Rural Development 3 - 3 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.

**0605465 Communication Methods and Technology Transfer
3 - 3 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, individual, group and mass media types, advantages and disadvantages of are examined. The course explores theoretical models of methods of extension 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.

**(9) Training, Research and Seminar
0605491**

**Seminar in Agricultural
Economics and
Agribusiness
1 - 1 (*)**

Students are trained to collect information through literature review on specific topics relating to agricultural economics and agribusiness management. Considerations are given to research design, procedures, and presentation of Formal presentations of student research are made and discussion by all results. students.



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0605494

Practical Work in

Agricultural Economics and

Agribusiness Management

-- 3 (*)

Practical training in the fields of farm business management, budgeting and financial analysis, agricultural project analysis, applications in marketing and extension and application of statistical, mathematical, economic and management tools, such as linear programming, for farm data analysis.

0605499

Field Training in

Agricultural Economics and

Agribusiness Management

-- 2 (*)

Practical training in the fields of farm business management, budgeting, financial feasibility, and monitoring of farm performance, applications in marketing and extension, and application of management tools for farm data analysis.

(*) Minimum successful 95 credit hours,___