AECN 801 Advanced Farm Management and Linear Programming
Crosslisted with: AECN 401
Description: The role of budgeting and linear programming in analyzing farm organization problems, theory of linear programming, linear program design, and analysis of linear programmed solutions to farm organization problems. Includes goal programming, multiple objective programming, risk programming, and financial modeling.
Credit Hours: 3
Max credits per semester: 3
Max credits per degree: 3
Format: LEC

AECN 804 Agricultural Law
Description: Legal problems and issues of unique importance to lawyers serving the agricultural sector. Representative topics include economic and environmental regulation of agriculture; organizing the farm business; financing agricultural production; marketing agricultural products; and managing agricultural risk.
Credit Hours: 3
Max credits per semester: 3
Max credits per degree: 3
Format: LEC

AECN 812 Organization and Performance of Agricultural Markets
Description: Economic theory of industrial organization and performance applied to agricultural input, raw product, and processed product markets. Buyer market power at first-handler level, spatial markets, vertical integration and contract coordination, and organizational forms unique to agriculture.
Credit Hours: 3
Max credits per semester: 3
Max credits per degree: 3
Format: LEC

AECN 814 Agricultural Price Analysis
Description: Economic relationships among the forces that determine the demand, supply and prices for agricultural commodities, products, and factors of production within and across markers. Theoretical foundations reviewed covering individual consumer demand, commodity and factor markets and price determination. Empirical methods applied in analyzing demand, supply and prices, and the factors affecting them. Multiple projects, including interpreting the results, to reinforce understanding of economic behavior.
Credit Hours: 3
Max credits per semester: 3
Max credits per degree: 3
Format: LEC

AECN 815 Analytical Methods in Economics and Business
Crosslisted with: ECON 815
Prerequisites: MATH 104 or 106
Credit Hours: 1-4
Min credits per semester: 1
Max credits per semester: 4
Max credits per degree: 4
Format: LEC
Prerequisite for: ECON 917

AECN 821 Orientation to Research
Description: Introduction to approaches to agricultural economics research. Critical evaluation of agricultural economics literature. Identify an area of research interest and present a review of current literature in the area.
Credit Hours: 1
Max credits per semester: 1
Max credits per degree: 1
Format: LEC

AECN 827 Static and Dynamic Optimization Methods
Description: Optimization methods in economics, organized into modules, each of which introduces the fundamental methods used in the analysis of a particular class of economic problems. Each module is taught within the framework of consumer, firm, or social welfare optimization problems.
Credit Hours: 2-4
Min credits per semester: 2
Max credits per semester: 4
Max credits per degree: 4
Format: LEC

AECN 827A Static Optimization with Mathematical Programming
Description: Optimization methods in economics, organized into modules, each of which introduces the fundamental methods used in the analysis of a particular class of economic problems. Each module is taught within the framework of consumer, firm, or social welfare optimization problems.
Credit Hours: 2
Max credits per semester: 2
Max credits per degree: 2
Format: LEC

AECN 827B Dynamic Optimization
Description: Optimization methods in economics, organized into modules, each of which introduces the fundamental methods used in the analysis of a particular class of economic problems. Each module is taught within the framework of consumer, firm, or social welfare optimization problems.
Credit Hours: 2
Max credits per semester: 2
Max credits per degree: 2
Format: LEC
AECN 832 Economics of Agricultural Production
Prerequisites: AECN 201, ECON 373, MATH 104
Description: Static economic analysis of multi-variant agriculture response functions. Resource and enterprise choice, cost functions, resource evaluation, and size and scale economies.
Credit Hours: 3
Max credits per semester: 3
Max credits per degree: 3
Format: LEC

AECN 840 Applied Welfare Economics and Public Policy
Prerequisites: AECN/ECON *873
Description: Principles of welfare economics applied to policy issues in agriculture and natural resources. Review of measures of household welfare, willingness to pay, and notions of Pareto optimality, aggregate welfare and market failure. Practical methods of comparative statics analysis of the effect of public policies on consumer and firm behavior, and on market equilibrium. Theory of externalities and welfare implications of market versus non-market allocation of public goods examined. Applications include evaluation of such policies as taxes, price supports, quotas, pollution controls, environmental damage liability, and intellectual property rights.
Credit Hours: 3
Max credits per semester: 3
Max credits per degree: 3
Format: LEC

AECN 852 Agricultural Finance
Crosslisted with: AECN 452, AECN 452H
Prerequisites: AECN 201 or 4 hrs accounting.
Description: Principles and concepts of financial management of farm and agribusiness firms developed. Various strategies for acquiring and using capital resources by the individual firm explored. Institutions providing the sources of agricultural credit are individually studied.
Credit Hours: 3
Max credits per semester: 3
Max credits per degree: 3
Format: LEC

AECN 856 Environmental Law
Crosslisted with: AECN 456, NREE 456
Prerequisites: Junior standing. AECN 357/NREE 357.
Description: Administrative law, risk assessment, environmental impact review, Clean Air Act, Clean Water Act, non-point pollution control, wetlands regulations pesticide and toxic substance regulation, solid and hazardous waste regulation, drinking water protection, land use regulation, energy policy, and international environmental law. Available through Online and Distance Education.
Credit Hours: 3
Max credits per semester: 3
Max credits per degree: 3
Format: PSI

AECN 857 Water Law
Crosslisted with: AECN 457, NREE 457, WATS 457
Prerequisites: AECN/NREE 357.
Description: Environmental impact review; public trust doctrine; endangered species; land use controls; wetlands regulation; surface and ground water rights; Indian and federal water rights; impact of water quality regulations on water allocation.
Credit Hours: 3
Max credits per semester: 3
Max credits per degree: 3
Format: PSI

AECN 865 Resource and Environmental Economics II
Crosslisted with: AECN 465, AECN 465H, NREE 465, NREE 465H, WATS 465, WATS 465H
Prerequisites: MATH 104 and one course in statistics.
Description: Application of resource economics concepts and empirical tools to resource management problems. Public policy issues involving environmental quality, land and water management.
Credit Hours: 3
Max credits per semester: 3
Max credits per degree: 3
Format: LEC

AECN 868 Advanced Resource and Environmental Economics
Prerequisites: AECN/ECON 873, AECN 865, ECON 817
Description: Application of conceptual and empirical tools for analyzing resource problems. Both public and private dimensions of resource management are considered with emphasis on public policy. Economics of environmental quality, management of exhaustible and renewable resources, valuation of non-market goods and key elements of environmental policy analysis.
Credit Hours: 3
Max credits per semester: 3
Max credits per degree: 3
Format: LEC

AECN 873 Microeconomic Models and Applications
Crosslisted with: ECON 873
Prerequisites: ECON 211, 212, and 215
Description: This course is intended for MA Option II students and others who do not plan to proceed to PhD studies. Analysis of microeconomic decision-making by individuals and firms with emphasis on consumer demand, production, cost and profit, market structure and the economics of games, uncertainty, and information.
Credit Hours: 3
Max credits per semester: 3
Max credits per degree: 3
Format: LEC

AECN 883 Ecological Economics
Crosslisted with: NRES 883, CDEV 883
Prerequisites: AECN 141 or ECON 212 or equivalent
Description: A synthesis across the notion of "utility" as represented in traditional environmental and natural resource economics, "ecology" in ecological economics, and "community" in behavioral economics. Ideas from thermodynamics with a focus on renewable resources. Development, organization, and enhancement of eco-business, eco-industry, eco-government and eco-communities.
Credit Hours: 3
Max credits per semester: 3
Max credits per degree: 3
Format: LEC

AECN 893 Law and Economics
Description: Introduction to economic tools and their application to the law. Overview of the principles of microeconomics and their application to various areas of private law (e.g., torts, contracts, property) and public law (e.g., environmental, constitutional, and criminal law & procedure).
Credit Hours: 3
Max credits per semester: 3
Max credits per degree: 3
Format: LEC
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<th>Course Title</th>
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<td>Focused agricultural economics topics through research, narrowly targeted</td>
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**Agricultural Economics (AECN)**
AECN 901E Agricultural Development
Prerequisites: ECON 912A and 911A, or permission
Description: Significant literature in selected fields of agricultural and resource economics to provide a broad background for conducting research in these fields.
Credit Hours: 3
Max credits per semester: 3
Max credits per degree: 3
Format: LEC

AECN 901J Natural Resource Economics
Prerequisites: AECN 868
Description: Significant literature in selected fields of agricultural and resource economics to provide a broad background for conducting research in these fields.
Credit Hours: 3
Max credits per semester: 3
Max credits per degree: 3
Format: LEC

AECN 902 Research in Agricultural Economics
Prerequisites: Appropriate section of AECN 901
Description: Investigation of a research issue in a field of agricultural economics. Identification of an issue, discovery and interpretation of relevant research, rigorous development of an additional contribution to the resolution of the issue.
Credit Hours: 3
Max credits per semester: 3
Max credits per degree: 15
Format: LEC

AECN 902A Production Economics
Prerequisites: AECN 901A.
Description: Investigation of a research issue in a field of agricultural economics. Identification of an issue, discovery and interpretation of relevant research, rigorous development of an additional contribution to the resolution of the issue.
Credit Hours: 3
Max credits per semester: 3
Max credits per degree: 3
Format: LEC

AECN 902B Agricultural Industrial Organization
Prerequisites: AECN 901B.
Description: Investigation of a research issue in a field of agricultural economics. Identification of an issue, discovery and interpretation of relevant research, rigorous development of an additional contribution to the resolution of the issue.
Credit Hours: 3
Max credits per semester: 3
Max credits per degree: 3
Format: LEC

AECN 902D International Agricultural Trade
Prerequisites: AECN 901C.
Description: Investigation of a research issue in a field of agricultural economics. Identification of an issue, discovery and interpretation of relevant research, rigorous development of an additional contribution to the resolution of the issue.
Credit Hours: 3
Max credits per semester: 3
Max credits per degree: 3
Format: LEC

AECN 902E Agricultural Development
Prerequisites: AECN 901D.
Description: Investigation of a research issue in a field of agricultural economics. Identification of an issue, discovery and interpretation of relevant research, rigorous development of an additional contribution to the resolution of the issue.
Credit Hours: 3
Max credits per semester: 3
Max credits per degree: 3
Format: LEC

AECN 921 Seminar in International Trade and Finance
Crosslisted with: ECON 921
Credit Hours: 3
Max credits per semester: 3
Max credits per degree: 3
Format: LEC

AECN 999 Doctoral Dissertation
Prerequisites: Admission to doctoral degree program and permission of supervisory committee chair
Credit Hours: 1-24
Min credits per semester: 1
Max credits per semester: 24
Max credits per degree: 99
Format: IND