# AGRICULTURAL ECONOMICS (AGEC)

#### AGEC 101 The Business of Agriculture (1 credit)

This course is intended for first-year students majoring in Agribusiness or Agricultural Economics. An examination of current issues in agriculture and how economic and business principles can be used to analyze issues, and career opportunities in the discipline.

### AGEC 204 (s) Special Topics (1-16 credits)

Credit arranged

#### AGEC 278 Farm and Agribusiness Management (4 credits)

Decision making and profit maximization using economic principles, records, enterprise analysis, and comparison of alternative farming practices. Three lectures and one 2-hour lab per week. Recommended Preparation: ECON 202.

#### AGEC 289 Agricultural Markets and Prices (3 credits)

Economics of agricultural markets and pricing institutions; analysis of supply, demand, elasticity, futures markets; institutional arrangements in food marketing. Recommended Preparation: ECON 202.

AGEC 299 (s) Directed Study (1-16 credits) Credit arranged

#### AGEC 301 Managerial Economics: Production (3 credits)

Microeconomic principles applied to agricultural production and the management of agribusiness firms with an introduction to spreadsheet based statistical, mathematical and optimization techniques for analyzing and solving real world management problems. **Prereqs:** ECON 202 or ECON 272; and MATH 143 with a grade of 'C' or better

#### AGEC 302 Managerial Economics: Consumption & Markets (3 credits)

Microeconomic principles applied to agricultural markets and consumer demand, with an introduction to spreadsheet based statistical and forecasting tools for analyzing associated real world pricing and consumer demand concerns facing managers of agribusiness firms. **Preregs:** ECON 202 or ECON 272; and MATH 143

#### AGEC 303 Principles of Agricultural Economics (1 credit)

Review, discussion and application of basic economic, agribusiness, and natural resource principle as applied to the agricultural economics profession. The principles are reviewed in a game show format. Students will have an opportunity to attend the American Agricultural Economics Association annual meetings and test their knowledge of these principles with students from other universities. Recommended preparation: AGEC 301 and AGEC 302. (Spring only)

Prereqs: AGEC 101 and AGEC 278; and ECON 272 or ECON 201 and ECON 202

#### AGEC 333 Introduction to Sales (3 credits)

Introduction to the economic and consumer behavior theory of the sales industry. Fundamentals of professional business-to-business selling, business-to-consumer selling, sales ethics, and career assessment. One evening practicum required and a day-long job shadowing required. (Spring only)

#### AGEC 356 Agricultural and Rural Policy (3 credits)

Goals, methods, results of economic programs and policies in agriculture, including role of governmental and farm organizations. Recommended Preparation: ECON 201 and 202.

## AGEC 389 Understanding and Using Futures and Options Markets (3 credits)

How futures and options markets work, types of futures and options markets, a practical understanding of their role as investment and risk management tools, and individual student management of a simulated futures and options trading account.

Prereqs: MATH 143 or higher, and ECON 202 or ECON 272

#### AGEC 389L Applied Commodity Market Analysis Lab (1 credit)

The lab builds upon agricultural marketing risk-management concepts introduced in AGEC 389: "Understanding and Using Futures and Options Markets." Students will develop spreadsheets containing historical supply and demand data along with actual cash and futures price series on chosen commodity sectors. Appropriate tools and methodologies will then be applied to analyze historical patterns, parameters, basis, seasonality and charting techniques. Lab material coverage will coincide with homework assigned in AGEC 489. Dataset, analytical tools, and actual futures trading platform will then be utilized to develop an applied risk-management hedging program. Typically Offered: Spring. **Coreqs:** AGEC 389

#### AGEC 398 (s) Internship (1-6 credits, max 6)

Graded P/F.

Prereqs: Permission

AGEC 404 (s) Special Topics (1-16 credits) Credit arranged

AGEC 405 (s) Professional Development (1-16 credits) Credit arranged

#### AGEC 410 Experiencing the Idaho Public Policy Making Process (1 credit) Assessment of policy topics currently facing the agricultural industry.

Students will travel to Boise while the legislature is in session to become familiar with the policy making process and to discuss current policy issues with industry and legislative officials. Three, three hour evening classes. (Spring Only)

Prereqs: AGEC 356 or permission

#### AGEC 414 Financial Analysis of Agricultural Firms (3 credits)

Applying cost analysis and three financial statements analysis to the management of an agricultural business. Evaluating relative performance of agricultural firms by using financial ratios, ride-on investment evaluation (by employing Net Present Value and Internal Rate of Return), leasing vs. buying, and financial modelling (proforma statement) for agricultural firms. Examination of cost and accrual based income statement for tax and management decisions. Create a cash flow statement for agricultural firms based on the income and balance sheet statements. Three hours of lec per week. (Fall Only) **Preregs:** ACCT 201 and AGEC 278, or permission

#### AGEC 433 Advanced Sales (3 credits)

Building on principles of professional sales and sales management, students will learn additional processes, procedures and practices of sales professionals. Students will apply the old and new concepts when selling a product to be determined to actual customers. Semester-long project requires working with sales professionals or in professional sales capacity.

Prereqs: AGEC 333

#### AGEC 447 International Development Economics (3 credits)

#### General Education: International

Cross-listed with ECON 447

This course focuses on the causes and consequences of poverty in developing countries. Topics include: macroeconomic theories and policies regarding sustainable economic growth, microeconomic theories of population growth and poverty traps, inequality, agriculture, urbanization, political economy, and sustainable development. Typically Offered: Spring.

#### Prereqs: ECON 201 and ECON 202, or ECON 272, or Permission

### AGEC 451 Applied Environmental and Natural Resource Economics (3 credits)

#### Cross-listed with ECON 451

Economic analysis of current issues pertaining to environmental and natural resources. Economic tools will be applied in the contexts of climate change, valuation of the environment, sustainable development, energy, water, environmental risk, etc. Specific cases used to describe economic theories and tools used by experts working in the field. **Prereqs:** AGEC 301 or AGEC 302, or ECON 351 or ECON 352, or by Permission.

#### AGEC 452 Water Economics and Policy Analysis (3 credits) Joint-listed with WR 552

This course will provide students with an in-depth look at the role of economics in water resource planning. Topics will include an introduction to water law, common concepts in hydrology, and the tools necessary to evaluate irrigation and other water use decisions. The course will focus on economic theory and a practical background of water resource management, as such, significant time will be spent developing the tools most frequently utilized by water resource economists. This includes Linear Programming, Cost/Benefit Analysis, Residual Imputation methods, Regression Analysis, Input-Output Modeling, Survey Design and Implementation, and Cost of Avoidance Techniques. Additional work required for graduate credit. Typically Offered: Spring.

**Prereqs:** AGEC 301 or AGEC 302, or ECON 351 or ECON 352. Cooperative: open to WSU degree-seeking students.

### AGEC 468 Risk Management: Commodity Merchandising (1 credit, max 6)

Fundamental functions of a commodity merchandiser within the agricultural food supply chain, including risk management through basis trading and margin management of a hedged marketing position, are learned through utilizing actual cash grain ownership and exchange-traded futures. One credit lab also engages students directly with regional grain trade, commodity brokers and allied industries.

#### AGEC 469 Risk Management: Commodity Trading (1 credit, max 6)

One-credit lab which engages students in the actual trading of agricultural commodity futures and options. Course emphasizes concepts, tools and strategies as they relate to identifying trading opportunities across agricultural commodities, managing portfolio risk and increasing operational profits through implementing trading positions in commodity futures markets. **Preregs:** Instructor Permission

#### AGEC 477 Law, Ethics, and the Environment (3 credits)

Cross-listed with ENVS 477, LAW 577

Joint-listed with ENVS 577

Examines the laws and related ethical questions pertaining to social and community-based natural resource and agroecosystem issues. Recommended Preparation: BLAW 265. Typically Offered: Varies. **Prereqs:** Junior standing and NRS 235 or FOR 235

#### AGEC 478 Advanced Agribusiness Management (3 credits) General Education: Senior Experience

The capstone class for Agribusiness and Agricultural Economic students. Economics and agribusiness theory is put into practice through decision cases. Team building, written, and oral presentation skills are stressed. Typically Offered: Spring.

Prereqs: AGEC 301, AGEC 302, ACCT 201, ACCT 202, and Senior standing.

#### AGEC 481 Agricultural Markets in a Global Economy (3 credits) General Education: International

Analysis of agricultural market competition and performance in a global economy; economics of global food and commodity markets and trade; economic principles applied to interaction of economic events in the world food economy. Typically Offered: Fall.

Prereqs: AGEC 301 or ECON 352 or permission

#### AGEC 490 Commodity Price Analysis (3 credits)

Methods used to analyze factors affecting agricultural prices, analysis of agricultural prices and price movements with respect to time, space, and form, and examination of methods of price forecasting and techniques of time series analysis.

Prereqs: AGEC 289, STAT 251, AGEC 389 or AGEC 489 or FIN 466

#### AGEC 497 Teaching Ag Econ/Agribusiness (1-3 credits, max 6)

Supervised class observation and course preparation, and an opportunity to present one or several lectures in specific agribusiness and agricultural economics areas. Incorporates learning and teaching methods applied in professional settings; may include advanced practices for competitions, field or lab activities, and client interactions. Max enrollment 5. Recommended preparation: senior standing.

Prereqs: Permission

#### AGEC 498 (s) Internship (1-16 credits) Credit arranged

AGEC 499 (s) Directed Study (1-16 credits) Credit arranged

AGEC 500 Master's Research and Thesis (1-16 credits) Credit arranged

AGEC 501 (s) Seminar (1-16 credits) Credit arranged

AGEC 502 (s) Directed Study (1-16 credits) Credit arranged

AGEC 504 (s) Special Topics (1-16 credits) Credit arranged

AGEC 505 (s) Professional Development (1-16 credits) Credit arranged

#### AGEC 506 Faculty Seminar Series (0 credits)

Focus on current issues impacting agriculture, natural resources, and community development though seminars introducing research occurring in the department.

#### AGEC 525 Master's Econometrics (3 credits)

Multivariate linear regression and analysis of variance with economic applications. Cooperative: open to WSU degree-seeking students. **Prereqs:** STAT 431 or equivalent; or Permission of Instructor.

#### AGEC 526 Master's Microeconomics Analysis (3 credits)

Master-level, calculus-based producer and consumer theory with selected managerial economics topics. Cooperative: open to WSU degree-seeking students. (Fall only) **Prereqs:** Permission

#### AGEC 527 Mathematics for Economists (3 credits)

Mathematical methods applicable to economic analysis and research. Cooperative course available to WSU degree-seeking students. (Fall only) **Preregs:** ECON 352 and MATH 160 or MATH 170

#### AGEC 529 Research Methods (1-2 credits)

Social science Master's thesis as a research journey toward craftsmanship including elements of imagination, modeling, mindfulness, guidelines, and mentor experiences. Cooperative: open to WSU degreeseeking students.

Prereqs: Graduate standing and Permission

#### AGEC 532 Natural Resource Economics and Policy (3 credits)

Economic principles and models applied to natural resource problems, issues, and policies. (Spring Only)

**Prereqs:** ECON 352 or Permission Cooperative: open to WSU degreeseeking students.

#### AGEC 533 International Trade and Policy (3 credits)

International trade theories and policies and research issues related to world trade, with emphasis on agricultural commodity markets. Cooperative: open to WSU degree-seeking students. (Spring Only) **Prereqs:** ECON 446, AGEC 481, or Permission

#### AGEC 534 Production Economics (3 credits)

Production economics theory and methods applied to problems of production response, economic optimization, technology, policy, risk and dynamics. Cooperative: open to WSU degree-seeking students. **Prereqs:** AGEC 526 or Permission

#### AGEC 535 Industrial Organization (3 credits)

Economic and strategic management theories and their relevance to agribusiness decision-making, including empirical applications. Typically Offered: Varies. Cooperative: open to WSU degree-seeking students.

#### AGEC 586 Regional Economic Development Theory (3 credits, max 3) Joint-listed with AGEC 486

Theory course in the explanation and causes of regional economic growth and community development. Topics include land economics, transportation models, central place theory, location theory, agglomeration, economic base theory, and economic growth theory. Additional projects/assignments required for graduate credit. Recommended Preparation: Introductory Microeconomics and Macroeconomics or Introduction to Bioregional Planning. Typically Offered: Spring.

#### AGEC 587 Regional Economic Development Methods (3 credits)

Methods course in the tools of regional economics and community development. Topics include Community Economic Profiling, Input-Output Analysis, Social Accounting, General Equilibrium Analysis, Social Benefit-Cost Analysis, and Non-Market Valuation. Cooperative: open to WSU degree-seeking students. (Fall only)

#### AGEC 597 Applied Economics Teaching Practicum (1-3 credits) Graded Pass/Fail. The teaching practicum is an opportunity for students

to improve teaching methods and techniques, and expand professional skills under the guidance of mentors from the AERS faculty. The teaching practicum may include classroom lectures, demonstrations, grading assistance, or other related activities.

#### AGEC 599 (s) Non-thesis Master's Research (1-16 credits) Credit arranged. Research not directly related to a thesis or dissertation. Prereqs: Permission