Scott T. Willard	Associate Professor Animal and Dairy Sciences
Rhonda Vann	Assistant Animal Scientist, Brown Loam Branch Experiment Station

Animal Physiology Courses—Course prerequisites are noted in parentheses.

PHY 6114 Cellular Physiology [same as BIO 6114]. 4 hours

PHY 6335 Anatomy and Physiology of Insects (ENT 6154) [same as ENT 6335]. 5 hours

PHY 6514 Animal Physiology [same as BIO 6514]. 4 hours

PHY 6611 Practice in Physiology of Reproduction (ADS 6613 or taken concurrently) [same as ADS 6611]. 1 hour

PHY 6613 Physiology of Reproduction (BIO 1504 or VS 2014) [same as ADS 6613]. 3 hours

PHY 6623 Physiology of Lactation (VS 2013 or BIO 1504) [same as ADS 6623]. 3 hours

PHY 6843 Poultry Physiology [same as PO 6843]. 3 hours

PHY 8000 Research/Thesis. 6 hours

PHY 8131 Endocrine Methods [same as ADS 8131]. 1 hour

PHY 8133 Endocrine Secretions [same as ADS 8133]. 3 hours

PHY 8243 Advanced Physiology of Reproduction (ADS 6613) [same as ADS 8243]. 3 hours

PHY 8333 Advanced Toxicology (ENT 6543 or elementary biochemistry) [same as ENT 8333]. 3 hours

PHY 8433 Bone, Muscle, and Fat Deposition in Animals (BCH 6613) [same as ADS 8433]. 3 hours

PHY 8623. Physiology of Digestion and Metabolism (CH 6523) [same as PO 8823]. 3 hours

PHY 8633 Homeostatic Regulations and Physiological Stress (PHY 8134 and BIO 6514) [same as ADS 8633]. 3 hours

PHY 8811-8841 Animal Physiology Seminar. 1 hour

PHY 8990 Special Topics in Physiology. 1-9 hours

PHY 9000 Research/Dissertation. 20 hours

Anthropology

(See Sociology and Anthropology)

Applied Economics

An Interdisciplinary Program

College of Agriculture and Life Sciences

Dr. Vance Watson, Dean

College of Business and Industry

Dr. Sara Freedman, Dean

Department of Finance and Economics

Dr. Paul Grimes, Department Head
Dr. Ben Blair, Graduate Coordinator
326 McCool Hall
662-325-2341
gsb@cobilan.msstate.edu
grad-econ@cobilan.msstate.edu

The Ph.D. in Applied Economics is a cooperative program offered by the graduate economics faculty of the College of Business and Industry and the Agricultural Economics faculty of the College of Agricultural and Life Sciences. The program provides advanced training in economic science to prepare graduates for research and teaching positions in academia, government, and business. For additional program information, e-mail the Economics Graduate Coordinator at grad-econ@cobilan.msstate.edu or phone 662-325-2341.

Admission Criteria—To obtain regular admission status, an applicant must meet all University-wide graduate admission requirements

and must achieve acceptable scores on each section of the GRE (verbal, quantitative, and analytical). A minimum TOEFL score of 575 is required for international students.

A student must have previously completed intermediate microeconomics, intermediate macroeconomics, differential and integral calculus, and one semester of statistics before beginning the required course sequence. Applications are reviewed in the spring semester for enrollment in the following fall semester. Graduate research and teaching assistantship decisions are usually made in March.

Program of Study—The Ph.D. degree requires a minimum of 48 hours of course work plus a dissertation (minimum of 20 hours). Course work can be completed in two and one-half years, excluding summers. All students enroll in a core curriculum composed of courses in microeconomic theory, macroeconomic theory and econometrics. A preliminary qualifying examination over economic theory and quantitative skills is administered after completion of the first-year courses.

Guided by his or her interests and career goals, the student may specialize in a number of areas by taking either the College of Business and Industry track or the College of Agricultural and Life Sciences track. Specific applied fields of specialization available include financial economics, regional economic development, natural resource and environmental economics, international economics, public economics, labor economics, industrial organization, agricultural production and marketing economics, and economic history and history of economic thought. A field consists of a minimum of two approved graduate course electives in one area of specialization. A student entering through the College of Business and Industry earn an applied field in financial economics and one additional field. Although the Department of Finance and Economics and the Department of Agricultural Economics teach the approved field courses, a student may, in consultation with his or her program of study Committee, include courses from related disciplines such as business, public administration, mathematics, and statistics. Prior to entering the dissertation stage, the student must pass a written comprehensive examination over the applied skills courses.

The dissertation is completed under the supervision of a major professor and an advisory committee drawn from the graduate faculty in the Departments of Finance and Economics and Agricultural Economics. Completion of the degree requires the student to present and defend the dissertation work to the satisfaction of the graduate economics faculty.

Provisional Admission—A student who initially obtains provisional admission status must receive a 3.00 GPA on all core courses taken during the first nine hours of enrollment in the program to achieve regular admission status. Neither transfer hours nor unclassified graduate hours can be used to fulfill this requirement.

Academic Performance—The student will be dismissed from the Ph.D. program in Applied Economics for any of the following reasons:

1. Failure to complete each of the following core courses with a grade of C or higher:

EC 8163	Microeconomics I
EC 8263	Microeconomics II
EC 8173	Macroeconomics I
EC 8273	Macroeconomics II
EC 8133	Econometrics I
EC 8145	Econometrics II

2. Making more than two grades below a B on courses in the student's program of study after admission to the program.
3. Qualifying examination:
   a) Failure to sit for this exam in the summer after the first year of course work, unless granted a postponement due to extenuating circumstances.
   b) Failure to sit for a required retake of this exam at the first opportunity.
   c) Failure to obtain a passing grade on this exam.
4. Applied skills paper:
   a) Failure to meet any deadline specified for this paper.
   b) Failure to obtain a passing grade on this paper.

A student may appeal a dismissal decision by following normal appeal procedures.

Prerequisite and Core Courses—A student must have previously completed the following undergraduate courses (or the equivalents) with a grade of C or higher before beginning the required graduate course sequence:

MA 1613	Calculus for Business and Life Sciences I
MA 1623	Calculus for Business and Life Sciences II
EC 3113	Intermediate Macroeconomics
EC 3123	Intermediate Microeconomics
ST 2113	Statistics for the Behavioral Sciences

All students admitted to the program enroll in a rigorous core curriculum composed of courses in microeconomic and macroeconomic theory, econometrics, research methodology, and applied skills.

Curriculum Tracks—The student may choose from two curriculum tracks: one with specialized fields from the **College of Business and Industry** or one with specialized fields from the **College of Agriculture and Life Sciences**.

Business and Industry Track

Fall Semester, First Year

AEC 6713 Quantitative Economics. 3 hours
AEC 8163 Consumers, Producers, and Markets. 3 hours
EC 8522 Seminar in the History of Economic Thought. 2 hours
FIN 8112 Capital Acquisition and Allocation. 2 hours*
FIN 8122 Corporate Liquidity Analysis. 2 hours*
*May be waived by previous credit in FIN

Spring Semester, First Year
EC 8163 Microeconomics I. 3 hours
EC 8173 Macroeconomics I. 3 hours
EC 8133 Econometrics I. 3 hours

Fall Semester, Second Year
EC 8263 Microeconomics II. 3 hours
EC 8173 Macroeconomics II. 3 hours
EC 8133 Econometrics II. 3 hours

Spring Semester, Second Year
EC 8643 Advanced Estimation and Diagnostics of Econometric Models. 3 hours
EC 8313 Regional Economic Analysis. 3 hours
FIN 8000 Level Field Elective. 3 hours

Fall Semester, Third Year
Economics Field Elective. 3 hours
Finance Field Elective. 3 hours
EC 9000 Dissertation. 6 hours

Spring Semester, Third Year
Economics Field Elective. 3 hours
EC 9000 Dissertation. 6 hours

Fourth Year
EC 9000 Dissertation. 11 hours minimum

Agriculture and Life Sciences Track

Fall Semester, First Year
AEC 6713 Quantitative Economics. 3 hours
AEC 8163 Consumers, Producers and Markets. 3 hours
EC 8522 Seminar in the History of Economic Thought. 3 hours
EC 8153 Research Philosophy and Methodology in Economics. 3 hours

Spring Semester, First Year
EC 8163 Microeconomics I. 3 hours
EC 8173 Macroeconomics I. 3 hours
EC 8133 Econometrics I. 3 hours

Fall Semester, Second Year
EC 8263 Microeconomics II. 3 hours
EC 8173 Macroeconomics II. 3 hours
EC 8133 Econometrics II. 3 hours

Spring Semester, Second Year
EC 8643 Advanced Estimation and Diagnostics of Econometric Models. 3 hours
AEC 8172 Topics in Applied Economics: Production and Supply. 2 hours
AEC 8722 Topics in Applied Economics: Marketing and Demand. 2 hours
Agricultural Economics Field Elective. 3 hours

Fall Semester, Third Year
AEC 8733 Topics in Applied Economics: Welfare Policy and Analysis. 3 hours
Agricultural Economics Field Elective. 3 hours
AEC 9000 Dissertation. 3 hours

Spring Semester, Third Year
Agricultural Economics Field Elective. 3 hours
AEC 9000 Dissertation. 6 hours

Fourth Year
AEC 9000 Dissertation. 11 hours minimum

Available Field Electives

Economic History and History of Economic Thought
EC 6183 U.S. Economic History
EC 6523 History of Economic Thought
AEC 8153 Research Philosophy and Methodology in Economics

Environmental and Natural Resource Economics
AEC 6233 Advanced Topics in Environmental Economics
AEC 8833 Environmental Resources and Economics

Experimental Economics
AEC 8843 Survey Design and Experimental Economics
AEC 7000 Readings in Experimental Economics

Finance
FIN 8223 Case Problems in Corporate Finance
FIN 8233 Advanced Financial Management
FIN 8313 Financial Management of Projects
FIN 8423 Portfolio Management
FIN 8723 Financial Institutions Management
FIN 8733 Financial Markets, Rates, and Flows

Industrial Organization

EC 8183	Industrial Organization
EC 7000	Readings in Industrial Organization

International Economics

EC 6323	International Economic Relations
EC 6303	Theory of Economic Development
EC 8323	Economic Analysis of Developing Nations
AEC 8823	The International Economy
FIN 6923	International Financial Management

Public Economics

EC 6423	Introduction to Public Finance
EC 6433	Problems in State and Local Finance
EC 8423	Public Finance
AEC 8733	Topics in Applied Economics: Analysis Welfare and Policy

Labor Economics

EC 6213	Personnel Economics
EC 6223	Labor Law and Employment Policy
EC 8113	Labor Theory and Analysis

Regional Economic Development

EC 6313	Introduction to Regional Economics
EC 6333	Applied Regional Economics

Completion Requirements—The dissertation is completed under the supervision of the student's Graduate Committee. Completion of the degree requires students to present and defend their dissertation work to the satisfaction of the Graduate Economics Faculty.

Applied Legal Studies

(See Marketing, Quantitative Analysis, and Business Law)

Architecture

College of Architecture, Art, and Design

Prof. James L. West, Dean
Dr. Larry Barrow, Department Head and Graduate Coordinator
Giles Hall
662-325-2202
gradoffice@coa.msstate.edu

Graduate study is offered in the College of Architecture, Art, and Design leading to the degree of Master of Science in Architecture. This program provides an extension and knowledge of skills in the areas of design, planning, visualization, CADCAM, housing, sustainability, and construction/manufacturing processes. This is a post-professional degree and does not lead to licensing in Architecture.

For additional information, contact the Graduate Program Coordinator, College of Architecture, P. O. Box AQ, Mississippi State, MS 39762.

Admission Criteria—Applicants must have a GPA of at least 3.00 and demonstrate competence in design, construction, or related academic work. This competence may be demonstrated through grades of B or better in design and computer science courses or through the submission of a portfolio. International students must have a TOEFL score of 600 or above and should submit GRE scores. Each applicant must submit an essay stating intent and aspirations for study.

Program of Study—The M.S. degree may be earned via two optional study tracts:

Plan A - Thesis: Requires 30 credit hours (24 graduate level course hours and six credit hours of research/thesis), and a comprehensive examination.

Plan B - Non-Thesis: Requires 32 graduate level credit hours includes (two credit hours of independent study for production of a professional paper or research project), and a comprehensive examination.

Research assistantships may be available for students in Plan A - Thesis option.

The Master of Science degree in Architecture offers an interdisciplinary, research-oriented academic experience for students from various fields who wish to use design visualization and information technology as a method of inquiry