DAIRY SCIENCE • DAIRY


2040 Techniques of Judging and Evaluating Dairy Cattle (3) F Development of techniques in a clinical setting; emphasis on visual evaluation, decision making, oral communication.

2042 Dairy Cattle Production Practices (3) S Prerequisite: DARY 1046, 2 hrs. lecture; 2 hrs. lab. Dairy cattle production practices; care, feeding, showing dairy cattle.

2043 Introductory Agricultural Genetics (3) S Prerequisite: BIOL 1002 or equivalent. Introduction to classical and modern genetic methodology used in agriculture including Mendelian principles, selection, and assisted reproductive technology, genetic engineering and other biotechnological methods.

2075 Milk and Dairy Foods (3) F Product processing techniques and related principles involved in market preparation of milk and dairy foods; emphasis on consumer and processor viewpoints related to product composition, processing, marketing, sanitation, and related environmental aspects.

3090 Dairy Products Curing (2) Development of sensory evaluation techniques in a clinical setting; emphasis on sensory evaluation, decision making, oral communication.

3150 Applied Animal Feed Formulation (3) S Prerequisite: ANSC 4540 or DARY 1046 or PLSC 1048 and MATH 1021 or equivalent. Formulation of feed for agricultural animals, including feed laws, feed stuffs, and requirements.


4040 Quality Assurance in the Food Industry (4) S,E 3 hrs. lab. Management techniques and principles necessary for artificial insemination in cattle.

4054 Dairy Farm Management (4) S,O Prerequisite: DARY 2049 or consent of instructor. 3 hrs. lecture; 3 hrs. lab. Principles of managing dairy cattle; recommended farm practices for economical milk production.

4081 Dairy Microbiology (3) S Prerequisite: BIOL 2051, 1 hr. lecture; 4 hrs. lab. Application of specific bacteriological procedures used in quality control and processing of dairy products.

4118 Applied Animal Breeding and Genetics (2) F,E Prerequisite: DARY 2072 or BIOL 2153 and EXST 2201. Management systems and methods of breeding for genetic improvement in farm livestock.

7004 Population Genetics in Animal and Plant Breeding (4) S Prerequisite: DARY 4110 or consent of instructor. 3 hrs. lecture; 2 hrs. lab. Genetic concepts concerning character- istics of populations.

7075 Advanced Physiology and Metabolism (3) F,O Comparative physiology of domestic and non-domestic animals; factors associated with obtaining and utilizing feed information for production; symbiotic relationship between the host animal and its host microorganisms.
DISASTER SCIENCE AND MANAGEMENT • DSM

2000 Disasters, Hazards, and the Environment (3) Also offered as GEOG 2000. Exploration of the interaction processes between natural/technical hazards and society that cause disasters; introduction to the natural and technological hazards and disasters; hazard and disaster management; environmental considerations and impacts.

2010 Fundamentals of Emergency Management (3) Introduction and overview of emergency management functions and processes in federal, state, and local governments; roles of nonprofit and private organizations in disaster planning, response, and recovery; critical management issues in effective response and recovery to natural and man-made hazards.

2020 Terrorism and Counter-Terrorism (3) Terrorism and its origin; modern terrorist attacks and campaigns; ideological and religious justifications for terrorism; domestic versus international terrorist networks; state sponsored terrorism; factors contributing to terrorism; and current and future terrorism prevention and response to terrorism.

3000 Technology and Emergency Management (3) Application of technology that may be applied in emergency planning, response, recovery, and mitigation; current and emerging technology applications; special issues and problems associated with the use of technology in emergency management.  

3900 Disaster Science and Management Internship (3) Prereq.: DSM 2000, DSM 2010, DSM 2030, DSM 2050; consent of instructor. Writing a DSM program coordinator and supervising faculty member. Faculty supervised field study with an agency or organization whose mission is considered relevant to the emergency management system or disaster planning, response, or mitigation.

3910 Hazards Seminar (1) F.S.Fr.Spr. Prereq.: DSM 2000 and junior standing; May be repeated for a max. of 9 sem. hrs. Credit. Research in dairy breeding and genetics, management, nutrition, and physiology; dairy manufacturing.

9000 Dissertation Research (1-12 per sem.) ‘S’ ‘Y’ ‘U’ grading.

ECONOMICS • ECO

General education courses are marked with stars (★).

★ 2000 Principles of Microeconomics (3) An honors course, ECON 2001, is also available. Credit will not be given for both this course and ECON 2010, 2020 or 2030. Study of household intentions, and how they interact in specific markets; theories of production price determination, trade, externalities, and public goods.

★ 2001 HONORS: Principles of Microeconomics (3) Same as ECON 2000, with special honors emphasis for qualified students. Credit will not be given for this course and ECON 2000.★

★ 2010 Principles of Macroeconomics (3) Prereq.: ECON 2000 or 2001. An honors course, ECON 211, is also available. Credit will not be given for both this course and ECON 2011 or 2030. Study of economy-wide phenomena, including inflation, unemployment, the monetary system, economic growth, monetary and trade finance.★

★ 2011 HONORS: Principles of Macroeconomics (3) Same as ECON 2010, with special honors emphasis for qualified students. Credit will not be given for this course and ECON 2010.★

★ 2030 Economic Principles (3) An honors course, ECON 2304, is also available. Credit will not be given for both this course and ECON 2036. Role of commercial banks, other financial institutions, and the central bank in affecting the performance of the economy; relationships of monetary and fiscal policy to prices, production, and employment; internal and external effects of U.S. fiscal and monetary policy.★

2035 Money, Banking, and Macroeconomic Activity (3) Prereq.: ECON 2000 and 2010 or 2030. An honors course, ECON 2036, is also available. Credit will not be given for both this course and ECON 2036. Role of commercial banks, other financial institutions, and the central bank in affecting the performance of the economy; relationships of monetary and fiscal policy to prices, production, and employment; internal and external effects of U.S. fiscal and monetary policy.★

2036 HONORS: Money, Banking, and Macroeconomic Activity (3) Same as ECON 2035, with special honors emphasis for qualified students. Credit will not be given for this course and ECON 2035.★

3999 Independent Study: Economics Problems (1-3) May be taken for credit for a max. of 6 sem. hrs. For undergraduate students with a grade point average of 3.00 or above. Independent economic research and study under the direction of a faculty member.

4010 The United States—Its Economic Growth (3) Prereq.: ECON 2000 or 2010; or ECON 2035. The American economy; modern problems dealing with money and banking, taxation, labor, international trade, and American positions on world affairs.


4025 The Russian Economy in the 20th Century (3) Prereq.: ECON 2000, 2010; or 2030. Also offered as HIST 4126. Operation, growth, and performance of the Russian economy under the tsarist and Soviet regimes; perestroika (restructuring) under Gorbachev; current economic trends.

4030 Development Economics (3) Prereq.: ECON 2000 and 2010; or 2030. Political, social, and technological factors affecting development of the third world.

4040 Economic Development Policy (3) Prereq.: ECON 2000 and 2010; or 2030. Global political economy of advanced and industrialized countries in the economic development of Third World countries.

4050 Economic Development of Europe (3) Prereq.: ECON 2000 and 2010; or 2030; or equivalent. Major elements in the economic development of resources, transportation, marketing, finance, labor, and economic policy.

4070 Economic Growth (3) Prereq.: ECON 2000 and 2010; or 2030. Analysis of the determinants of economic growth through development of the basic micro and empirical models of economic growth; discussion of both old and new growth theory and convergence of income levels across countries.

4075 American Economic History to 1860 (3) See HIST 4075.

4076 American Economic History, 1860 to the Present (3) See HIST 4076.

4110 Public Finance (3) Prereq.: ECON 2000 and 2010; or 2030. Economic theory applied to the private-market and to the public sector, emphasis for qualified students.★

4220 Wage and Employment Analysis (3) Prereq.: ECON 2000 and 2010; or 2030. The labor market; labor supply and demand, human capital, racial and sex discrimination, effects of minimum wage laws, causes of various wage and employment differentials.

4230 Economics of Human Resources (3) Prereq.: ECON 2000 or 2030. Application of empirical research and economic theory to human resource management and both internal labor market; turnover, promotion, evaluation, layoffs, and termination from an economic perspective.

4230 Environmental Economics (3) Prereq.: ECON 2000 and 2010; or 2030. Market failure and government failure, benefit cost analysis, the economics of energy, the efficient allocation of pollution permits; pollution control; if 20% of source air pollution, water pollution, and toxic wastes.

4255 Applied Resource Economics (3) Prereq.: ECON 2000, 2010; or 2030. Economic policies, and resource problems; cost-benefit and other empirical techniques used to examine these problems.


4421 Health Care Economics (3) Prereq.: ECON 2000 and 2010; or 2030. Health care markets and payment, with particular emphasis on hospitals, physicians, and other health care providers, as well as government programs.


4445 Internship in Economics (3) Prereq.: consent of instructor. Pass/fail grading. On-the-job experience in approved positions with economic content.

4520 International Trade (3) Prereq.: ECON 2000 and 2010; or 2030. Introduction to the basic theories of international trade and private sector, international, and post-neoclassical theories; discussion on how these theories relate to current economic events and policies; brief overview of major U.S. trade policy, analysis of major bilateral and multilateral trading agreements including the North American Free Trade Agreement, the European Union, and the World Trade Organization.

4530 The Chinese Economy (3) Prereq.: ECON 2000 and 2010; or 2030. Review of the history of the economy in China; major governmental policies in China that have shaped the growth and development of the Chinese economy; the development of the manufacturing and industrial sectors; China’s role in the international trade and financial markets.

4540 Economic Forecasting (3) Prereq.: ECON 2000 and 2010; or 2030 and IDS 2630; or equivalents. Applications of methods used in business and economic forecasting; trend analysis, time-series modeling, regression analysis and combination forecasting.

4550 International Finance (3) Prereq.: ECON 2015 or equivalent. Exchange rates and the foreign exchange market; exchange rate determination in the short run and in the long run; alternative international currency systems, macroeconomic policy coordination under fixed and floating exchange rate regimes.

4560 Central Banking and Monetary Policy (3) Prereq.: ECON 2015. History, economic functions, operating techniques, and policies of central banks; the role of monetary policy in promoting and stabilizing the economy; the Federal Reserve System and current problems of monetary policy and control.

4560 Introduction to Microeconomics (3) Prereq.: ECON 2000 and 2010; or 2030; and college algebra; or equivalent. Not normally open to students who have completed a different calculus. Mathematical techniques used by economists; their application to economic analysis.