851. Crop Ecology
Approval of department.

852. Soil Fertility and Plant Nutrition
Winter. 4 credits.

853. Soil Chemistry
Winter. 4 credits.

854. Soil Physics
Fall. 3 credits.

855. Soil Physics and Plant Breeding
Fall. 3 credits.

856. Soil Biochemistry
Spring. 3 credits.

857. Origin and Classification of Soils
Winter. 3 credits.

858. Research
Fall. 3 credits.

859. Design and Analysis of Agronomic Experiments
Spring. 3 credits.

DAIRY SCIENCE

214. Dairy Production
Fall. 4 credits.

314. Dairy Herdsman Techniques
Winter. 4 credits.

323. Dairy Cattle Judging
Spring. 4 credits.

371. Dairy Seminar
Spring. 1 credit.

424. Dairy Cattle Breeding
Spring. 4 credits.

499. Research
Fall, Winter, Spring, Summer. 3 credits.

951. Plant Breeding Biometrics
Winter. 3 credits.

952. Plant Breeding Biometrics
Winter. 3 credits.

953. Plant Breeding Biometrics
Winter. 3 credits.

954. Plant Breeding Biometrics
Winter. 3 credits.

955. Plant Breeding Biometrics
Winter. 3 credits.

956. Plant Breeding Biometrics
Winter. 3 credits.

957. Plant Breeding Biometrics
Winter. 3 credits.
444. **Milk Secretion**  
Winter, 4(4-0) Interdepartmental and administered jointly with the Physiology Department.  

445. **Endocrinology and Reproduction of Farm Animals**  
Fall, 4(4-0) FSL 240. Interdepartmental and administered jointly with the Physiology Department.  
Endocrine and reproductive systems are presented with emphasis upon characteristics which can be altered for economic benefit and upon causes, prevention, and treatment of endocrine abnormalities.

490. **Special Problems**  
Fall, Winter, Spring, Summer. Variable credit. May re-enroll for maximum of 10 credits. Approval of department.

1DC. **The Impact of Animal Resource Management Upon the World's Developing Nations**  
For course description, see Interdisciplinary Courses.

550. **Topics in Dairy Science**  
Fall, Winter, Spring. Variable credit. May re-enroll for credit. Approval of department. Topics from breeding, management, nutrition, or physiology, changing from term to term to include recent technical advances.

899. **Research**  
Fall, Winter, Spring, Summer. Variable credit. Approval of department.

925. **Advanced Ruminant Nutrition**  
Fall of even-numbered years, 4(4-0) BCH 452, FSL 601 or approval of department. Microbiology, physiology and biochemistry of ruminant digestion and the absorption and metabolism of rumen fermentation products.

945. **Physiology of Mammalian Reproduction**  
Winter, 4(5-0) DRY or FSL 445 or approval of department. Interdepartmental with the Department of Physiology. Chemistry and biosynthesis of reproductive hormones. Gonad, hypothalamic and pituitary development of reproductive potential. Ovulation, fertilization, implantation and placentation will be studied. Relationships of conceptus, uterus and corpus luteum. Parturition.

999. **Research**  
Fall, Winter, Spring, Summer. Variable credit. Approval of department.

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**EARTH SCIENCE**  
See Geology.

**EC**

**ECONOMICS**

**College of Business**

Courses are classified as follows:  

Money and Banking—318, 320, 470.  
International Economics—427.  
Public Finance—408, 407, 408.  
Price and Value Theory—334, 325, 428.  
Income and Employment Theory—308, 451, 479.  
History of Economic Thought—421, 452.  

200. **Introduction to Economics**  
Fall, Winter, Spring, Summer. 4(4-0) Open to Freshmen. Students may begin sequence with either 200 or 201.  
Problem of unemployment; meaning and determination of national income; the multiplier; the accelerator; fiscal policy; deficit spending; monetary policy; basic creation of money; international aspects of the employment problem.

201. **Introduction to Economics**  
Fall, Winter, Spring, Summer. 4(4-0) Open to Freshmen. Students may begin sequence with either 200 or 201.  
Problem of resource allocation; price determination (demand, supply); applications to agricultural policy; diminishing returns; behavior of the firm (determination of quantity of output, hiring of factors); aspects of international trade.

210. **Fundamentals of Economics**  
Fall, Winter. 4(4-0) MTH 215 or 228; or concurrently. Students may not earn credit in 210 if they have credit in either 200 or 201.  
Introductory course in economic theory; employing mathematics, when useful, as a tool analysis. Covers consumer and business behavior, markets and the price system, income distribution, and elements of employment theory.

1DC. **Introduction to Latin America III**  
For course description, see Interdisciplinary Courses.

251H. **Households, Firms and Markets**  
Fall, 5(5-0) Honors College students. Microeconomic theory and its applications to analysis and policy. Substitutes for 201, 324 and 325.

252H. **Aggregative Economics and Public Policy**  

305. **Industrial Relations and Trade Unionism**  
Fall, Winter, Spring, Summer. 5(5-0) Development, aims, structure, and functions of labor and employer organizations. Their relation to economic, political, and legal institutions and their impact on society. Primary issues in collective bargaining.

318. **Money, Credit and Banking**  
Fall, Winter, Spring, Summer. 4(4-0) 200 or 210.  
Commercial banking and the money supply. The Federal Reserve System, the Treasury, and other financial institutions. Sources and uses of funds in the financial market.

320. **Macroeconomics I**  
Fall, Winter, Spring, Summer. 3(3-0) 200 and 201 or 210.  

321. **Macroeconomics II**  
Fall, Winter, Spring, Summer. 3(3-0) 320.  
Expansion of role of monetary factors in macroeconornic theory. Theories of economic growth and cycles. Study of macroeconomic problems of inflation, unemployment, and other current policy problems.

324. **Microeconomics I**  
Fall, Winter, Spring, Summer. 3(3-0) 200 and 201, or 210.  
Theory of production and cost. Theory of the firm under varying market structures.

325. **Microeconomics II**  
Fall, Winter, Spring, Summer. 3(3-0) 200 and 201, or 324.  

330. **Investments and Security Markets**  
Fall, Spring. 3(3-0) 200 or 210, Juniors.  
The stock market; principles of investment; analysis of selected industries and corporations; regulation by the Securities and Exchange Commission.

337. **American Social and Economic History: Foundations**  
Winter. 4(4-0) Interdepartmental with and administered by the History Department.  
Multiple sources of economic growth in economic, social and political change, education, science and technology, political action, and other factors, mid-19th century.

338. **American Social and Economic History: Modern Trends**  
Spring. 4(4-0) Interdepartmental with and administered by the History Department.  
Urbanization, origins and implications of large-scale organizations in business and other sectors of society, and sources of economic growth since mid-19th century.

361. **Economic Development of Asia**  
Fall, 3(3-0) 200 and 201 or 210.  
Population and resources; comparison of three economic systems: Communism in China, free enterprise in Japan and socialism in India; the role of Japan in regional trade and development.

362. **Economic Development of Latin America**  
Winter. 3(3-0) 200 and 201 or 210.  
Concentration of political and economic power as related to income distribution, tax structures, agrarian reform; inflation; trade, exchange rates, integration; population and employment policy.

363. **Economic Development of Tropical Africa**  
Spring. 3(3-0) 200 and 201 or 210.  
Interdepartmental with Public Affairs Management.  