Special Problems in Food Science 890.

Fall, Spring, Summer. 1 to 3 credits. A student may earn a maximum of 8 credits in all enrollments for this course.

R: Open only to graduate students in Food Science. Approval of department; application required.
Individual investigation of an area of food science. QA: FSC 880

891. Selected Topics in Food Science Fall, Spring, Summer. 1 to 4 credits. A student may earn a maximum of 6 credits in all

enrollments for this course. R: Open only to graduate students in Foods or Food Science or Human Nutrition.

Topics of current interest and importance in basic and applied areas of food science. QA: FSC 850

892. Food Science Seminar

Fall, Spring. 1(1-0) A student may earn a maximum of 4 credits in all enrollments for this course.

R: Open only to graduate students in Food Science. Critical review of literature, organization and communication of scientific data in food science. QA: FSC 990

898. Master's Research

Fall, Spring, Summer. 1 to 5 credits. A student may earn a maximum of 5 credits in all enrollments for this course. R: Open only to graduate students in Food Science.

Approval of department.

Directed research in support of Plan B master's de-

gree requirements.

899. Master's Thesis Research

Fall, Spring, Summer. 1 to 10 credits. A student may earn a maximum of 99 credits in all enrollments for this course. R: Open only to M.S. students in Food Science.

QA: FSC 899

999. **Doctoral Dissertation Research**

Fall, Spring, Summer. 1 to 24 credits. A student may earn a maximum of 99 credits in all enrollments for this course.
R: Open only to Ph.D. students in Food Science.

FOOD SYSTEMS ECONOMICS **FSM** AND MANAGEMENT

Department of Agricultural **Economics** College of Agriculture and Natural Resources

Introduction to Food Systems 200. Management

Fall. 3(3-0)

organization and operation of the industrialized food system: agricultural production, food processing, manufacturing, wholesaling, retailing and consump-tion. Application of economic and management principles to firms and the overall food system. QA: FSM 200

Agribusiness and Food Sales 320.

Spring. 3(3-0) P: FSM 200 or ML 300. R: Not open to freshmen and

sophomores.
Selling processes and activities within agribusiness and food firms. Principles and techniques of sales. Operation of sales organizations. QP: FSM 200, ML 300

Agribusiness Labor and Personnel Management 325.

Fall. 3(3-0)

P: FSM 200 or MGT 302 or concurrently. R: Not open to freshmen and sophomores.

Labor for farms and agribusinesses: planning, recruiting, training, scheduling, motivating, supervising, and evaluating. Labor regulations, compensation, and records.

QP: FSM 200 or MGT 302

330. Farm Business Management

Spring. 3(4-0)
P: FSM 200 or MGT 302. R: Not open to freshmen. Management, planning, and control of farm produc-tion, marketing and financial activities. Problems and evaluation of alternative solutions. Economic principles, budgeting, financial statements. QP: FSM 200 QA: FSM 330, FSM 430

412. Financial Management in the Food

System
Spring. 3(3-0)
P: FSM 330, FI 311. R: Not open to freshmen and sophomores.

Analysis of agricultural business performance using financial statements. Capital budgeting of durable investments. Risk. Alternative methods to control capital asset services. Financial markets and credit institutions affecting agriculture. QP: FSM 330 QA: FSM 412, FSM 430

421. Public Policy Issues in Food and Agribusiness

Spring. 3(3-0)
P: EC 201, FSM 200. R: Not open to freshmen and

Objectives, rationale, and consequences of public policy for food and agriculture. Analysis of economic implications for food and agribusinesses, farmers, consumers, and society. QP: EC 201, FSM 200 QA: FSM 421

429. Agribusiness Management

Spring. 3(4-0)
P: FSM 330. R: Open only to seniors and graduate

Analysis of agribusiness management functions in-cluding planning, organizing, and controlling. Integra-tion of production, marketing, and financial aspects of agribusiness. Solutions to agribusiness managerial problems. QP: FSM 200

Commodity and Futures Marketing 441.

Spring. 3(3-0) P: FSM 200, EC 201; STT 200 or STT 201 or STT 315. R: Not open to freshmen and sophomores. Supply, demand and prices in commodity markets. Futures and options and their role in forward pricing. Agricultural and food markets. QP: STT 201, EC 201, FSM 200 QA: FSM 441

Food Industry and Cooperative 443. Marketing

Spring. 3(3-0)
P: FSM 200. R: Not open to freshmen and sophomores. Multiple firm and cooperative marketing methods. organization and operation of cooperatives, marketing orders, trade associations and other forms of group action in the food system. QP: FSM 200 QA: FSM 443

Agricultural Development in Less 462 Developed Countries Fall. 3(3-0)

P: EC 201; PAM 260 recommended. R: Not open to freshmen and sophomores.
Factors responsible for agricultural growth, as well as technical and institutional change. Sustainable

strategies for increasing food production and rural

incomes. QP: EC 201 QA: FSM 462

490. Independent and Supervised Study

Fall, Spring, Summer. 1 to 6 credits. A student may earn a maximum of 7 credits in all enrollments for this course.

P: FSM 200; ML 335 or FSM 330. R: Open only to FSM majors. Approval of department; application

In-depth independent study of topics and issues affecting the food system. Complementary to previous coursework, adapted to career aspirations. QP: FSM 200, FSM 335 or FSM 330 QA: FSM 480

FORESTRY

FOR

Department of Forestry College of Agriculture and Natural Resources

Tenets of Forestry Fall. 1(1-0) 201.

R: Open only to Forestry students. Completion of Tier I writing requirement.

History, founding principles, and core concepts of forestry. Stewardship, conservation, professional ethics, and current forestry issues.

Introduction to Forestry

Fall, Spring. 3(3-0)
Historical development of forestry. Forest growth, protection, management, and products. Relationship of national and world economy and policy to forestry. Emphasis on multiple uses of forests. QA: FOR 202

204. Forest Vegetation

Fall. 4(3-3)

Nomenclature, classification, and identification of woody plants. Tree structure as it relates to growth and ecosystem dynamics.

Plants and Their Environment 220.

Fall. 3(3-0)

Relationships between plants and fundamental climatic, edaphic, and biotic factors. Structure and function of different ecosystems in relation to environmental factors.

Wood Technology 304.

Fall. 4(3-2)

P: CEM 141, PHY 231. R: Not open to freshmen and sophomores.

Structure and identification of wood. Physical and mechanical characteristics. Major industrial timber utilization processes including manufacture of lumber,

furniture, composites, and paper. QP: PHY 237, CEM 141, MTH 111 QA: FOR 209, FOR 430, FOR 431

Forest Biometry 306.

Spring. 4(3-2)
P: MTH 116, FOR 201, FOR 204. R: Not open to freshmen and sophomores.

presented and sopnomores. Describing location and area of forest resources. Quantification of site, stand, and tree characteristics. Sampling and inventory. Predicting growth and yield. QP: MTH 111, FOR 204 QA: FOR 320, FOR 420

Forest and Agricultural Ecology Fall. 4(3-3) Interdepartmental with Crop

and Soil Sciences. P: CSS 210, BOT 105.

Structure and function of ecosystems managed for crop and wood production. Productivity, nutrient cycling, community dynamics as affected by management intensity and natural disturbance. Dynamics of managed versus natural ecosystems. QA: FOR 304, CSS 412

Silviculture

Spring. 4(3-3) P: CSS 210, FOR 204. R: Not open to freshmen and sophomores.

Ecophysiology of tree growth and reproduction. Stand structure, composition and growth. Intermediate stand treatments. Natural and artificial reproduction. Silvi-

cultural techniques. QP: FOR 204, CSS 210 QA: FOR 305

408. Forest Management Fall. 4(3-2) P: FOR 420.

Management of forests for timber production in a multiple-use context. Yield projections, harvest scheduling, management prescriptions, project analysis and

administration. QP: FOR 305, FOR 455 QA: FOR 458