

FAMILY ECOLOGY* FE

College of Human Ecology†

110. Man in His Near Environment
(H E 110.) Fall, Winter, Spring.
3(3-0) New students in Human Ecology.

Ecological approach to the study of man and his near environment stressing the quality of life as it relates to individual, family and environmental forces.

331. Management and Decision Making in the Family

(FCS 331.) Fall, Winter, Spring.
Summer of even-numbered years. 3(3-0) S S 233.

Presentation of the integrated nature of home management; concerns, values, and goals as reflected in decision-making about family resources.

332. Theory and Application of Home Management

(FCS 332.) Fall, Winter, Spring.
4(1-4) with residence; 4(2-4) without residence.
FCS 261; 331 or concurrently; HNF 220 or approval of department.

Principles of effective home management and their application in a living situation. Residence in a home management house provided.

400H. Honors Work

Fall, Winter, Spring, Summer. Variable credit. May re-enroll for a maximum of 16 credits. Seniors; approval of department.

401. Senior Seminar

(H E 401.) Fall, Winter, Spring.
3(2-0) Seniors.

402. Problems in Curriculum Methods and Materials

(H E 402.) Fall, Summer. 2 to 5 credits. May re-enroll for a maximum of 15 credits. Approval of department.

403. Problems in Testing and Evaluation

(H E 403.) Winter, Summer. 2 to 5 credits. May re-enroll for a maximum of 9 credits. ED 465 or approval of department.

437. Management of Work Capacity in the Home

(FCS 437.) Winter, Summer of even-numbered years. 3(3-0) 331 or approval of department.

Analysis of the resource of human work capacity in the home—physiological and psychological factors; principles and use of work simplification.

438. Family Finance

(FCS 438.) Fall, Winter, Spring.
Summer of even-numbered years. 3(3-0) S S 233.

Major financial alternatives available to families during the founding, active parenthood, and retirement stages. Implications for the community of the family's financial decisions.

439. Consumer Economic Problems

(FCS 439.) Fall, Spring, Summer of odd-numbered years. 3(3-0) 438 or approval of department.

Current aspects of consumer behavior including motivation, credit buying, and selected economic problems.

450. Selected Topics in Family Ecology

(H E 450.) Spring. 3 credits. Seniors.
Current issues of concern to professional family ecologists.

495. Independent Study

Fall, Winter, Spring, Summer. Variable credit. May re-enroll for a maximum of 12 credits. Approval of department.

498. Field Study

Fall, Winter, Spring, Summer. Variable credit. May re-enroll for a maximum of 12 credits. Approval of department.

800A. Seminar in Family Ecology

(FCS 800A.) Fall, Winter, Spring.
Summer of even-numbered years. 3(3-0) May re-enroll for a maximum of 12 credits. Approval of department.

813A. Special Studies in Family Ecology

(FCS 813A.) Fall, Winter, Spring, Summer. Variable credit. Approval of department.

819. Research Methods

(FCS 819.) Winter. 3(3-0) Approval of department. Interdepartmental with and jointly administered with Human Environment and Design Department.

820. Critique of Research

Spring. Summer of even-numbered years. 3(2-0) 819.

A critical analysis of research on the family and its near environment. Emphasis is placed on critique of methodology with some consideration of research needs.

822. New Developments

(ED 822E.) Summer of odd-numbered years. 3(3-0) ED 436.

Trends in the field of family ecology and the relevance to current social needs.

823. Curriculum

(H E 823, ED 822K.) Fall, Summer.
3(3-0) Approval of department.

Clarification and use of a rationale in curriculum development. Special problems in application.

824. Programs in Home and Family Life Education

(ED 822M.) Spring of odd-numbered years. Summer. 3(3-0) Approval of department.

Develops depth in home and family living courses offered in secondary school programs.

825. Methods of Teaching Adults

(ED 828A.) Spring of even-numbered years. 3(3-0) Approval of department.

Developmental needs of adults and changes in society affecting families as a basis for development of adult programs in homemaking education. Experiences will be provided with programs in progress.

826. Supervision

(ED 837B.) Winter of odd-numbered years; Summer of even-numbered years. 3(3-0) Approval of department.

Objectives, techniques, and organization of supervising teaching in teacher education programs.

827. Evaluation

(ED 868.) Winter, Summer. 3(3-0) Approval of department.

Evaluation procedures and practices for various levels of educational programs in the area of human ecology.

830. Individual Readings

Fall, Winter, Spring, Summer. Variable credit. Approval of department.

831. Values and Family Behavior

Winter of even-numbered years. Summer of odd-numbered years. 4(4-0) Approval of department.

Role and function of values as fundamental to understanding behavior in the family. Cognition and actualization of values. Resolution of value conflicts. Conceptual and methodological approaches to study of values.

832. Theories of Management and Decision-Making in the Family

(FCS 832.) Winter of odd-numbered years. 4(2-1) 331.

Comparative study of conceptual frameworks of family decision-making and of interrelated decisions, including both individual and social choices.

835. Family As an Ecosystem

Fall. 3(3-0) Approval of department.

Family viewed as an ecosystem. Emphasis placed on energy and communication cycles within the family. Integration of management, family dynamics and developmental concepts.

837. Allocation of Family Resources

(FCS 837.) Spring of even-numbered years. Summer of odd-numbered years. 4(4-0) 437, 438.

Contributors to and recipients of family resources both human and non-human. Patterned use of resources and the effect of definite factors such as standard of living on those patterns.

838. Analysis of Family Income

(FCS 838.) Spring of odd-numbered years. Summer of even-numbered years. 3(3-0) 438.

Forms of family income and economic problems relative to the protection of family economic security through insurance and investments, property rights and descent of property, and estate planning.

840. Workshops in Family Ecology

(H E 830.) Summer. 2 to 10 credits. May re-enroll for a maximum of 10 credits. Approval of department.

Laboratory approach which provides opportunities for experienced educational personnel to concentrate their study on common professional problems.

841. Seminars in Home Economics Education

(H E 831.) Spring, Summer. 2 or 3 credits. May re-enroll for a maximum of 9 credits. Approval of department.

Seminars in selected topics.

842. Laboratory and Field Experience

(H E 832.) Fall, Winter, Spring, Summer. 3 to 5 credits. May re-enroll for a maximum of 9 credits. Approval of department.

Supervised graduate practicums, observation, internships, and externships.

843. Independent Study in Home Economics Education

(H E 833.) Fall, Winter, Spring, Summer. 1 to 5 credits. May re-enroll for a maximum of 9 credits. Approval of department.

Study on an individual or group basis.

899. Research

Fall, Winter, Spring, Summer. Variable credit. Approval of department.

*Established July 1, 1970.

†Name changed July 1, 1970. Formerly College of Home Economics.

901. Internship

(H E 901.) Fall, Winter, Spring, Summer. 3 to 5 credits. May re-enroll for a maximum of 9 credits. Approval of department.

Supervised advanced graduate practicums, observation, internships, and externships in the various areas of emphasis.

902. Independent Study in Family Ecology

(H E 902.) Fall, Winter, Spring, Summer. 1 to 5 credits. May re-enroll for a maximum of 9 credits. Approval of department.

Study on an individual basis.

903. Seminars in Family Ecology

(H E 903.) Spring, Summer. 2 or 3 credits. May re-enroll for a maximum of 9 credits. Approval of department.

Seminars in selected topics.

932. History and Philosophy of Home Management

(FCS 932.) Fall, Summer of even-numbered years. 3(2-0)

History and development of home management as a field of study. Values and decision-making as analyzed by various disciplines and as used in home management.

933. Apprentice Experience in Home Management Residence

(FCS 933.) Fall, Winter, Spring. 3(1-6) 437 and approval of department.

Experience in presenting home management as a resident course. Each student works with one home management group. Limited to a few well-qualified students.

999. Research

Fall, Winter, Spring, Summer. Variable credit. Approval of department.

**FISHERIES AND
WILDLIFE**

F W

**College of Agriculture and
Natural Resources**

200. Resource Ecology and Man

For course description, see Interdisciplinary Courses.

202. Soils and Man's Environment

Winter. 3(3-0) Interdepartmental with Resource Development Department, Natural Resources, and Soil Science and administered by Soil Sciences.

Use of soil-water resources in a technological society as it relates to environmental quality. Nature of pollution problems and their possible solutions. Food production and world population.

301. Fish and Wildlife of North America

Winter. 5(3-4) N S 192 or B S 212.

Comparative study of fish and wildlife groups in North America, their significant life history stages, morphology, migrations, habitats and populations. Common species are identified in the laboratory.

305. Management of Fish and Wildlife Resources

Winter. 3(3-0) IDC 200 or other ecology course.

Effects of regulations, refuges, stocking, species introductions, habitat manipulation, artificial

feeding, genetic improvement, land use, ecological research and control of predators, diseases and competitors in the production of fish and game.

374. Biological Oceanography

(474.) Winter. 3(3-0) N S 193 or B S 212.

Biology of marine animals, with emphasis on physical, chemical and biological factors affecting their abundance and distribution.

402. Conservation Education

Fall, Winter, Spring. 4(3-2) Elementary education Juniors.

Nature, distribution, abundance and interrelationships of natural resources. Biological and physical components of field, range, forest, and aquatic associations. Includes techniques of teaching about the environment.

403. Conservation Education

Spring. 4(3-2) Elementary education juniors.

A continuation of 402. Special emphasis afforded lakes, streams, and wetlands.

404. Fisheries and Wildlife Problems

Fall, Winter, Spring, Summer. 1 to 5 credits. May re-enroll for a maximum of 12 credits. B S 212; 6 credits of fisheries and wildlife; approval of department.

To give undergraduate majors an opportunity to study special topics in fisheries and wildlife.

424. Wildlife Population Analyses

Spring. 4(3-2) 305 or approval of department.

Population mensuration; reproductive and survival rates; sex and age determination; handling and marking methods.

425. Wildlife Habitat Analyses

Spring. 4(2-4) BOT 450 or ZOL 389 or FOR 220.

Evaluation of environmental factors affecting wildlife species; food and cover measurements. Determination of limiting factors.

426. Ecology of Migratory Birds

Fall. 4(2-4) ZOL 461 or approval of department.

Ecological, behavioral, and physiological characteristics affecting population parameters of migratory birds and applications of these relationships to the management of migratory wildlife resources.

427. Wildlife Biology and Management

Winter. 4(2-4) 424; ZOL 389 or BOT 450.

Ecology and management of resident wildlife on farm, forest and range lands.

450. Natural Resource Administration

Fall, Winter. 4(4-0) Interdepartmental with the Forestry, Park and Recreation Resources, and Resource Development Department and administered by the Forestry Department.

Concepts and methods of economics and administration and application of techniques to management of wildlands.

471. Ichthyology

Spring. 3(2-3) ZOL 305 or 315. Interdepartmental with the Zoology Department.

Classification and natural history of fishes. Emphasis on food, game, and forage fishes.

473. Fishery Biology and Management

Fall. 5(3-3) ZOL 471.

Biology of fishes with special reference to dis-

tribution and natural history, and application of this knowledge to problems of obtaining maximum return from fishery resources.

476. Limnology

Winter. 3(3-0) B S 212. Interdepartmental with the Zoology Department.

Ecology of lakes and streams with special reference to physical, chemical, and biological factors affecting their productivity.

477. Limnological Methods

Winter. 3(0-9) 476 concurrently; ZOL 481; ENT 301, 302 recommended. Interdepartmental with the Zoology Department.

Methods and instruments of limnological field investigation on lakes and streams.

484. Advanced Conservation Education

Fall of odd-numbered years. 4(3-2) Approval of department.

Designed for secondary teachers. Areas of outdoor education, school camping, recreation, biology teaching and camp counseling. This course will offer both content and methods applicable to people working in specified types of jobs.

801. Seminar in Fisheries and Wildlife

Fall, Winter, Spring. 1(1-0)

Graduate problems and current developments of importance.

802. Advanced Topics

Fall, Winter, Spring, Summer. 1 to 6 credits. May re-enroll for a maximum of 15 credits. Approval of department.

Study of selected advanced topics in detail and depth.

899. Research

Fall, Winter, Spring, Summer. Variable credit. Approval of department.

999. Research

Fall, Winter, Spring, Summer. Variable credit. Approval of department.

**FOOD SCIENCE AND
HUMAN NUTRITION***

**College of Agriculture and
Natural Resources
College of Human Ecology†**

Food Science

FSC

211. Introduction to Food Science

Spring. 3(3-0)

Modern food processing, world food problems, and the basic characteristics of processed foods.

242. Meats, Poultry and Fishery Products I

Fall. 3(2-2) Interdepartmental with the Animal Husbandry Department.

Principles of evaluation and nutritive value. Identification of grades and cuts of beef, pork, lamb and poultry products.

300. Dairy Products I

Spring. 3(2-2)

Composition, use, classification and market grades, methods of storage and factors affecting keeping quality of dairy products.

*Named changed October 17, 1970. Formerly Food Science and Human Nutrition and Foods.

†Named changed July 1, 1970. Formerly College of Home Economics.