

## Descriptions – FAMILY AND CHILD ECOLOGY

### of Courses

#### 837. Allocation of Family Resources

Spring of even-numbered years. Summer of odd-numbered years. 4(4-0) F E 437, F E 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

Spring of odd-numbered years. Summer of even-numbered years. 3(3-0) F E 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

Summer. 2 to 10 credits. May reenroll 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.

#### 842. Laboratory and Field Experience

Fall, Spring. 4 credits. Approval of department.

Supervised graduate practicums, observation, internships, and externships.

#### 843. Independent Study in Family Ecology

Fall, Winter, Spring, Summer. 1 to 5 credits. May reenroll for a maximum of 9 credits. Approval of department.

Study on an individual or group basis.

#### 865. Community Systems for Community Development

(814.) Winter. 4(3-2) RD 864 or approval of department. Interdepartmental with and administered by the Department of Resource Development.

Basic systems of the community, their functions and interrelatedness; the family, economic, government, education, and supportive service systems. Field trips required.

#### 866. Community Development Field Study

(816.) Spring. 4(2-4) RD 865 or approval of department. Interdepartmental and jointly administered with the Department of Resource Development.

On-site study of major community systems. Individual or group investigation of community efforts, problems, and opportunities. Field project required.

#### 899. Master's Thesis Research

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

#### 901. Internship

Fall, Winter, Spring, Summer. 1 to 5 credits. May reenroll 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

Fall, Winter, Spring, Summer. 1 to 5 credits. May reenroll for a maximum of 9 credits. Approval of department. Study on an individual basis.

#### 903. Seminars in Family Ecology

Spring, Summer. 2 or 3 credits. May reenroll for a maximum of 9 credits. Approval of department.

Seminars in selected topics.

#### 932. History and Philosophy of Human Ecology

Fall, Summer of even-numbered years.

3(2-0)

History and development of human ecology as an interdisciplinary field of study. Values underlying the field. Current emphasis.

#### 999. Doctoral Dissertation Research

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

## FAMILY MEDICINE F M

### College of Osteopathic Medicine

#### 590. Special Problems in Family Medicine

Fall, Winter, Spring, Summer. 1 to 8 credits. May reenroll for a maximum of 32 credits. Approval of department.

Each student will work under direction of a faculty member on an experimental, theoretical or applied problem.

#### 600. Clinical Practicum in Family Medicine

Fall, Winter, Spring, Summer. 2 to 12 credits. May reenroll for a maximum of 24 credits. Grade P in all courses offered in terms 1 through 8 or approval of department.

Opportunity for direct involvement and experience in functioning family practice. Emphasizes patient, office, and personnel management. Provides understanding and consideration of responsibilities encountered in the practice of family medicine.

#### 620. Directed Studies

Fall, Winter, Spring, Summer. 2 to 24 credits. May reenroll for a maximum of 48 credits. Admission to a college of medicine or approval of department.

Individual or group projects on special problems related to family medicine.

#### 632. Principles of Family Practice I

Winter. 1(0-3) Admission to a college of medicine.

Cognitive material and development of the psychomotor skills necessary to prepare the student physician for assignment to a family practice clinical setting.

#### 642. Principles of Family Practice II

Spring. 1(0-4) F M 632.

Continuation of F M 632.

#### 652. Principles of Family Practice III

Fall, Summer. 1(0-4) F M 632 or approval of department.

Continuation of F M 642.

#### 662. Principles of Family Practice IV

Fall, Winter. 1(0-4) F M 632 or approval of department.

Continuation of F M 652.

#### 672. Principles of Family Practice V

Winter, Spring. 1(0-4) F M 632 or approval of department.

Continuation of F M 662.

#### 682. Principles of Family Practice VI

Spring, Summer. 1(0-4) F M 632 or approval of department.

Continuation of F M 672.

#### 692. Principles of Family Practice VII

Fall, Winter, Spring, Summer. 1(0-4) F M 632 or approval of department.

Continuation of F M 682.

## FAMILY PRACTICE FMP

### College of Human Medicine

#### 500. Preceptorship Training

Fall, Winter, Spring, Summer. 3 to 12 credits. May reenroll for a maximum of 36 credits. No more than 3 credits toward degree requirements. One year of medical school. Interdepartmental with and administered by the Department of Human Medicine.

Field experience in primary care taught by primary care physicians throughout the state to medical students from Michigan State University, University of Michigan and Wayne State University.

#### 530. Care of the Elderly

Fall, Spring. 3(2-2) Student in H M, OST or other clinical program or approval of instructor. Interdepartmental with the Department of Community Health Science.

Case studies of the care of the elderly based on the physician patient-interaction with elderly persons and their families. Family systems applications to health care. Associated clinical experience.

#### 540. Families in Crisis: A Clinical View

Winter, Spring. 1 to 4 credits. May reenroll for a maximum of 4 credits. Student in medicine, nursing, or graduate student in psychology, counseling, social work or related field. Interdepartmental with the Department of Psychiatry.

Dynamics of family crises as might be experienced in health care settings. Videotapes, readings and small group discussions to illustrate family dynamics.

**580. Special Topics in Family Practice**  
Fall, Winter, Spring, Summer. 1 to 6 credits. May reenroll for a maximum of 18 credits. Approval of department.  
Explore and study special aspects and modes of family-oriented health care.

**610. Family Practice Clerkship**  
Fall, Winter, Spring, Summer. 8 to 17 credits. May reenroll for a maximum of 34 credits. H M 602.  
A clerkship in a model family practice unit with graded responsibility and supervision in the care of families and their medical problems with emphasis on primary, continuing and comprehensive care.

**611. Introduction to Office Practice**  
Fall, Winter, Spring, Summer. 5 to 6 credits. H M 602.  
A one month preceptorial exposure to the office practice of family practice in a variety of settings.

**FISHERIES AND WILDLIFE**

**FW**

**College of Agriculture and Natural Resources**

**100. Introduction to Fisheries and Wildlife**  
Fall. 1(1-0) Freshmen Fisheries and Wildlife Majors.  
Fisheries and wildlife as a profession. Academic and nonacademic needs to meet professional objectives, using current management problems as a focus for discussion.

**1DC. Resource Ecology and Man**  
For course description, see Interdisciplinary Courses.

**202. Soils and Man's Environment**  
Winter. 3(3-0) Interdepartmental with the departments of Fisheries and Wildlife and Resource Development, and Agriculture and Natural Resources.  
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. Approved through Winter 1981.

**301. Fish and Wildlife of North America**  
Winter. 5(3-4) B S 212 or approval of department.  
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. Principles of Fisheries and Wildlife Management**  
Spring. 3(3-0) IDC 200 or approval of department. Not open to majors in fisheries-limnology or wildlife-ecology options.  
Ecological concepts in management. Effects of regulations, refuges, stocking, species introduction, habitat manipulation, artificial feeding, genetic improvement, land use and control of predators, diseases and competitors on the production of fish and game.

**328. Vertebrate Pest Control**  
Fall. 3(3-0) B S 212 or approval of department.  
Role of wild vertebrate animals as agents damaging to man's interests; the concepts of damage and control; damage control techniques. Field trip.

**340. Wildlife Biometry**  
Winter. 4(3-2) MTH 111, six credits in fisheries and wildlife.  
Survey of statistical formulas, methods and applications of statistics to problems in fisheries and wildlife.

**374. Biological Oceanography**  
Winter. 3(3-0) B S 212 or approval of department.  
Biology of marine animals, with emphasis on physical, chemical and biological factors affecting their abundance and distribution.

**376. Introductory Limnology**  
Winter. 3(3-0) B S 212; students may not receive credit for both F W 376 and F W 476.  
Lake and stream ecology including effects of natural and man-induced perturbations on freshwater ecosystems.

**402. Environmental Conservation Education**  
Spring, Summer. 4(3-2) Education majors or approval of department.  
Nature, distribution and interrelationships of natural resources dictating the quality of man's environment. Principles of resource use, study of natural objects and techniques of teaching in and about the environment.

**404. Fisheries and Wildlife Problems**  
Fall, Winter, Spring, Summer. 1 to 5 credits. May reenroll 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.

**420. Ecology of Animal Parasites**  
Summer. 6 credits. B S 212 or approval of department. Given at W. K. Kellogg Biological Station. Interdepartmental with the departments of Microbiology and Public Health, and Zoology. Administered by the Department of Microbiology and Public Health.  
Parasitism of animals by protozoa, helminths and arthropods with emphasis on the interrelationships of host-parasite associations with the natural environments.

**421. Stream Ecology**  
Fall. Summer—given at W. K. Kellogg Biological Station. 3(3-0) ENT 240 or approval of department. Interdepartmental with and administered by the Department of Entomology.  
An in-depth examination of stream ecosystems—physical, chemical and biological aspects. Field work will be centered on local streams. Laboratory exercises will involve manipulations necessary for the determination of population energy budgets, with special emphasis on aquatic insects. Field trips required.

**424. Wildlife Population Analyses**  
Spring. 4(3-2) BOT 450 or ZOL 389, or concurrently.  
Population mensuration; reproductive and survival rates, sex and age determination; handling and marking methods. Field trips.

**425. Wildlife Habitat Analyses**  
Fall. 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) F W 424; ZOL 389 or BOT 450.  
Ecology and management of resident wildlife on farm, forest and range lands.

**450. Natural Resource Administration**  
Fall, Spring. 4(4-0) Seniors. Interdepartmental with Agriculture and Natural Resources and the departments of Forestry, Park and Recreation Resources, and Resource Development. Administered by the Department of Forestry.  
Concepts and methods of administering wildland properties. The legal, economic and social environment. Benefit-cost analysis of management changes. Unit organization, personnel management and accounting. Presents a systems view of administration.

**455. Natural Resource Economics**  
Winter. 4(4-0) FOR 450 or approval of department. Interdepartmental with the departments of Forestry, Park and Recreation Resources, and Resource Development, and Agriculture and Natural Resources. Administered by the Department of Forestry.  
Basic economic and political principles and techniques that govern the production and consumption of forest land products, including basic forest valuation procedures.

**471. Ichthyology**  
Spring. 3(2-3) F W 301 or ZOL 320 or ZOL 428. Interdepartmental with the Department of Zoology.  
Classification and natural history of fishes. Emphasis on food, game, and forage fishes.

**473. Fishery Biology and Management**  
Fall. 3(3-3) ZOL 471.  
Biology of fishes with special reference to distribution and natural history, and application of this knowledge to problems of obtaining maximum return from fishery resources.

**475. Fish Culture**  
Spring. 3(3-0) F W 473.  
Artificial propagation of freshwater fish including hatchery management, nutritional and environmental requirements, disease and parasite control and intensive fishery management. Utilization of hatchery stock in fisheries management.

**476. Limnology**  
Winter. 3(3-0) CEM 131 and CEM 161; BOT 450 or ZOL 389. Students may not receive credit for both F W 376 and F W 476. Interdepartmental with the Department of Zoology.  
Ecology of lakes and streams with special reference to physical, chemical and biological factors affecting their productivity.