

**672. Principles of Family Practice V**  
Winter. 1(0-4) Admission to medical school and approval of department.  
Continuation of 662.

**675. Principles of Family Medicine IV**  
Winter. 4(4-0) Admission to medical school and approval of department.  
Continuation of 665.

**680. The Osteopathic Examination VI**  
Spring. 1(0-2) Admission to medical school and approval of department.  
Continuation of 670.

**682. Principles of Family Practice VI**  
Spring. 1(0-4) Admission to medical school and approval of department.  
Continuation of 672.

**685. Principles of Family Medicine V**  
Spring. 4(4-0) Admission to medical school and approval of department.  
Continuation of 675.

**690. The Osteopathic Examination VII**  
Summer. 1(0-2) Admission to medical school and approval of department.  
Continuation of 680.

**692. Principles of Family Practice VII**  
Summer. 1(0-4) Admission to medical school and approval of department.  
Continuation of 682.

**695. Principles of Family Medicine VI**  
Summer. 4(4-0) Admission to medical school and approval of department.  
Continuation of 685.

## FAMILY PRACTICE\* FMP

### College of Human Medicine

**500. Preceptorship Training**  
Fall, Winter, Spring, Summer. 1 to 3 credits. 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.

## FISHERIES AND WILDLIFE F W

### College of Agriculture and Natural Resources

**100. Introduction to Fisheries and Wildlife**  
Fall. 1(1-0)

Fisheries and wildlife as a profession. Academic and curricular needs to meet professional objectives, using current management problems as a focus for discussion.

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

\*Established July 1, 1974.

**202. Soils and Man's Environment**  
Winter. 3(3-0) Interdepartmental with Resource Development Department, Natural Resources, and Soil Science and administered by Soil Science.

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) 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.

The role wild animals play as a damaging agent 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.

**402. Environmental Conservation Education**  
Fall, Winter, 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 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.

**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 and 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.

**424. Wildlife Population Analyses**  
Spring. 4(3-2) IDC 200 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, Spring. 4(4-0) Seniors. Interdepartmental with the departments of Forestry, Parks and Recreation Resources and Resource Development and Natural Resources. 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.

**471. Ichthyology**  
Spring. 3(2-3) 301 or ZOL 305 or 314. Interdepartmental with 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 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) 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) 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. Outdoor Environmental Education**  
Fall. 4(3-2) Juniors or approval of department.

Using the outdoors as a teaching laboratory for ecological studies of plant and animal communities. Designed primarily for secondary teachers.