FISHERIES AND WILDLIFE  
F W

College of Agriculture and Natural Resources

100. Introduction to Fisheries and Wildlife  
Fall, Winter, Spring, and Summer. 3 credits. 

293. Resource Ecology  
(IDC 200) Fall, Winter, Spring, Summer. 3 credits. 

301. Fish and Wildlife of North America  
Winter. 3 credits. 

302. Ecosystem Processes  
Spring. 3 credits. 

305. Principles of Fisheries and Wildlife Management  
Winter. 3 credits. 

328. Vertebrate Pest Control  
Fall. 3 credits. 

340. Wildlife Biometry  
Winter. 4 credits. 

374. Biological Oceanography  
Winter. 3 credits. 

402. Environmental Conservation Education  
Fall. 3 credits. 

404. Fisheries and Wildlife Problems  
Fall, Winter, Spring. 3 credits. 

428. Interdepartmental with the Department of Zoology  

434. Wildlife Resource Policy and Management  
Winter. 3 credits. 

455. Natural Resource Economics  
Fall. 3 credits. 

471. Ichthyology  
Spring. 3 credits. 

473. Fishery Biology and Management  
Fall. 3 credits. 

475. Fish Culture  
Spring. 3 credits. 

476. Limnology  
Winter. 3 credits. 

477. Limnological Methods  
Winter. 3 credits. 

495. Limnology  
Winter. 3 credits. 

511. Wildlife and Freshwater Ecology  
Fall. 3 credits. 

534. Limnology of Forest Watersheds  
Fall. 3 credits. 

555. Limnology of Lakes and Reservoirs  
Fall. 3 credits. 

560. Limnology of Streams  
Fall. 3 credits.
Courses of Descriptions - Fisheries and Wildlife

478. Stream Ecology
Spring. 3(3-0) ENT 429, ZOL 389 or BOT 430 or F W 302 or approval of department. Students may not receive credit in both F W 478 and ENT 421. Interdepartmental with the departments of Entomology and Zoology. Biological, chemical, physical, and geological processes which determine the structure and function of stream ecosystems.

872. Fish Communities and Aquatic Ecosystems
Winter of even-numbered years. 3(3-0) Approval of department. Processes by which fish influence the structure and function of aquatic ecosystems.

873. Ecology and Management of Stream Fish
Winter of odd-numbered years. 3(4-0) FW 376, ZOL 389 or BOT 450; or FW 476 or concurrently. Flowing water habitat as it affects fish, with influences of climate, vegetation, land use, water withdrawal, damming, channel alteration and fishery management.

874. Advanced Biological Limnology
Fall of odd-numbered years. 3(4-0) FW 477, or approval of department. Historical and current contributions to concepts of community structure, energy flow and materials cycling in aquatic eco-systems.

875. Chemical Limnology
Winter. 4(3-1) FW 476, FW 477 or approval of department. Application of analytical chemistry concepts and technologies to fundamental chemical mechanisms in natural and polluted water systems. Special consideration given to selected heterogeneous equilibria.

876. Applied Limnology
Spring. 3(3-0) FW 874 or FW 875 or approval of department. Aquatic ecology: quantitative relationship between physical, chemical and biological parameters in polluted and unpolluted lakes and streams.

877. Fish Population Dynamics
Winter of odd-numbered years. 3(3-0) Approval of department. Quantitative analysis of fish populations; rates of change and their underlying causes.

878. Dynamics of Aquatic Contaminants
Winter of odd-numbered years. 4(2-4) FW 476, FW 477 or approval of department. Movement of contaminants through aquatic ecosystems. Chemical and physical processes controlling decomposition and disposition of contaminants. Relationship of chemical form to bioavailability and toxicity. Statistical and deterministic predictive simulation models.

897. Ecosystem Ecology
Fall. 3(3-0) ZOL 389 or BOT 450. Interdepartmental with and administered by the Department of Zoology. Concepts of ecosystem structure, energy flow, and nutrient cycling in representative terrestrial and aquatic eco-systems.

899. Doctoral Dissertation 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

101. Food and Society (N)
Fall, Winter. 3(3-0) Interdepartmental with Human Nutrition and Foods. Analysis of the scientific, social and environmental aspects of food in determining the quality of human life. Introduction into the principles of food preservation and safety.

256. Meats, Poultry and Fishery Products I
Fall. 4(2-2) Interdepartmental with the Department of Animal Science. Principles of evaluation and nutritive value. Identification of grades and cuts of beef, lamb and poultry products.

300. Dairy Products
Spring. 3(2-2) CEM 143 or approval of department. Chemical and physical properties of milk and milk products. Survey of dairy products and the technologies involved in their manufacture.

310. Food Safety and Microbiology
Fall. 4(3-3) CEM 143 or concurrently or approval of department. Not open to students with credit in FSC 440. Interdepartmental with the Department of Microbiology and Public Health. Effects of food handling, preparation and service on food safety. Microorganisms in foods, sanitation, food borne disease and food service regulations.

311. Food Processing and Preservation
Winter. 3(3-0) CEM 132. Not open to majors in Food Science. Effects of processing, packaging and preservation on the quality of foods. Demonstrations of use of ingredients, evaluation of products and results of various processing methods.

328. Food Plant Sanitation
(FSC 332.) Winter. 4(3-3) FSC 211, MPH 200, CEM 141B. Sanitary aspects of food processing operations. Water quality, equipment design, bacteriological agents, pest control, personnel hygiene, biological hazards, and regulatory agencies. Field trips required.