

Descriptions – Forestry

of Courses

850. *Administering the Public Land Agency*

Spring. 4(4-0) FOR 450 or approval of department.

Case studies of administrative problems in land management agencies. Students are organized as teams and prepare team reports on specified aspects of each case.

855. *The Research Process in Natural Resources*

Fall. 3(3-0) Approval of department. Interdepartmental with and administered by the Department of Resource Development.

Research and decision processes as applied in natural resource investigations. Research organization and applications of research results. Oriented to management, social science, and policy studies. Preparation of project proposals.

899. *Master's Thesis Research*

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

909. *Timber Economics*

Fall of odd-numbered years. 3(3-0) FOR 457, FOR 809, EC 800, EC 801, EC 802.

Economic theory relevant to study of timber production, regional and national timber supply, demand and price, the effect of institutional factors, and other topics by review of past research.

910. *Resource Economics Proseminar*

Spring. 3(3-0) May reenroll for a maximum of 9 credits. Approval of department. Interdepartmental with the departments of Agricultural Economics and Resource Development.

A seminar wherein advanced graduate students in the fields of resource economics participate with faculty in the joint conduct of a major research project in resource economics and policy.

960. *Simulation Models in Natural Resource Management*

Winter of odd-numbered years. 3(3-0) RD 855 and knowledge of FORTRAN programming or approval of department. Interdepartmental with and administered by the Department of Resource Development.

The role of simulation models in developing management strategies. Applications of computer simulation in natural resources. Modeling of decision systems in natural resources management.

975. *Least Squares Analysis and Linear Programming in Forestry Research*

Fall of odd-numbered years. 4(4-0) MTH 112, STT 423, CPS 110 or CPS 120.

Application of least squares analysis and linear programming to problems in forestry research. Include both linear and nonlinear least squares models. Case studies from several forestry disciplines.

976. *Multivariate Methods in Forestry Research*

Winter of even-numbered years. 4(4-0) FOR 975 or approval of department.

Application of multivariate techniques such as principal components, canonical analysis, factor analysis, and clustering to problems in forestry research. Case studies drawn from several forestry disciplines.

999. *Doctoral Dissertation Research*

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

FRENCH

See Romance and Classical Languages.

GENETICS

College of Natural Science

800. *Genetics Seminar*

Fall, Winter, Spring. 1(1-0) May reenroll for a maximum of 12 credits. Approval of director.

Student seminar to cover genetics subjects not considered in formal courses. Course is also intended to give students experience in reviewing and organizing literature in a subject, and orally presenting and defending the analysis.

804. *Gene Transmission*

Fall. 3(3-0) ZOL 441 or approval of instructor.

Molecular and formal genetic studies of the replication, recombination, repair and segregation of genetic information in procaryotes and eucaryotes. Experimental design and methodology will be emphasized.

805. *Genetic Organization, Action and Regulation*

Winter. 3(3-0) GEN 804.

Molecular and formal genetic studies of the organization, expression and regulation of gene activity in procaryotes and eucaryotes. Experimental design and methodology will be emphasized.

806. *Population and Quantitative Genetics*

Spring. 3(3-0) ZOL 441 or approval of instructor.

Genetics of quantitative characteristics in populations with special reference to polygenic variation and its interactions with environment, gene action and its measurement, mating systems, and selection.

880. *Special Problems*

Fall, Winter, Spring, Summer. 1 to 4 credits. May reenroll for a maximum of 12 credits. Approval of instructor.

Students with special interests and abilities may study published literature in a selected genetics topic or they may carry on research in the laboratory on a selected subject in collaboration with genetics faculty.

890. *Selected Topics in Genetics*

Fall, Winter, Spring, Summer. 2 to 5 credits. May reenroll for a maximum of 9 credits. ZOL 441 and approval of instructor.

Topics will be selected from molecular genetics, physiological genetics, population genetics, quantitative genetics, evolution, radiology and mutagenesis, microbial genetics, somatic cell genetics, behavioral genetics, and human genetics.

999. *Doctoral Dissertation Research*

Fall, Winter, Spring, Summer. 3 to 12 credits. Majors.

Research for the doctoral dissertation in genetics.

GEOGRAPHY

GEO

College of Social Science

Courses are classified as follows:

Cultural--170, 201, 801, 901.

Economic--213, 409, 435, 809, 835, 906.

Field Techniques--415, 850.

Geographic Education--458.

Historical--310, 810, 910.

Independent Research--400H, 411, 818, 899, 918, 999.

Medical--470, 870, 970.

Physical--206, 206L, 429, 430, 431, 432, 451, 834, 902.

Political--170, 908.

Population--215, 320, 836, 934.

Quantitative Methods--427, 428, 811.

Regional--204, 300, 315, 316, 321, 322, 340, 342, 360, 365, 812, 912.

Recreational and Environmental--100, 307, 309, 828.

Theory and Philosophy--150, 425, 825, 826.

Urban--318, 401, 402, 403, 466, 805.

Visual Media and Techniques--122, 223, 224, 424, 426, 446.

100. *Man, Location and Environment*

Fall, Winter, Spring. 3(3-0)

Concepts, theory, and methods of modern Geography.

122. *The World of Maps*

Fall, Winter, Spring. 3(3-0)

Discussion of types, practical applications, and sources of maps.

150. *Geography of Selected Current Problems*

Fall, Winter, Spring. 2(2-0)

The geographic perspective is used to examine U.S. and world problems of major concern such as international conflicts, environment quality, spatial change, and economic development.

170. *Future Worlds (S)*

Fall, Spring, Summer. 3(3-0)

Geographical approach to environmental, biological, economic, social and political problems facing mankind between now and year 2000.

1DC. *Introduction to Resource Ecology*

For course description, see Interdisciplinary Courses.

201. *Geography of Culture*

Fall, Winter, Spring. 3(3-0)

A systematic discussion of cultural geography, stressing cultural processes and relationships.

204. *World Regional Geography (S)*

Fall, Winter, Spring, Summer. 4(4-0)

Man's relationship with natural and cultural environments.

206. *Physical Geography*

Fall, Winter, Spring, Summer. 4(4-0)

Analysis of weather, climate, landforms, soils, water and biotic factors of man's environment, including their spatial, genetic, and functional interrelationships.

206L. *Physical Geography Laboratory*

Fall, Winter, Spring. 1(0-2) GEO 206 or concurrently.

Laboratory study of geographic aspects of map interpretation, aerial photographs, weather, climate, soils, landforms, and vegetation.