455. Natural Resource Economics
Fall. 4(4-0) Approval of department. Interdepartmental with Agriculture and Natural Resources and the departments of Fisheries and Wildlife, Forestry, and Resource Development. 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.

470. Commercial Recreation Enterprises
Fall. 4(4-0) EC 201; AFA 202 or approval of department.
The planning, design, impact, and natural resource base of privately-owned outdoor recreation businesses.

471. Recreation Products Consumption
Winter. 4(4-0) PRR 470 recommended. EC 201, AFA 202, or approval of department. Recreation, economic and personality theories of consumption. Specific recreation product industry case studies.

490. Supervised Study
Fall, Winter, Spring, Summer. 1 to 4 credits. May reenroll for a maximum of 16 credits. Approval of department. Seminars on current problems. Supervised readings. Individual undergraduate research on selected topics.

494. Senior Proseminar
Winter. 1(1-0) Senior majors. Seminars on current professional problems and literature.

801. Dimensions of Recreation and Leisure
Fall. 3(3-0) PRR 344 or approval of department. Concepts of recreation and leisure in the United States and their implications for professional development. Extensive reading into concepts, definitions, values, educational components and historic roots of recreation and leisure.

840. Recreation Economics
Spring. 4(4-0) FOR 809 or approval of instructor. Interdepartmental with the department of Forestry and Resource Development. Application of economic analysis to recreation resource problems including measurement of demand and supply, valuation of recreation resources, determination of economic impact, economic decision making and policy considerations.

842. Park and Recreation Policy
Winter. 3(3-0) Interdepartmental with the Department of Resource Development. Recreation, leisure and work concepts. Determination of needs for recreation facilities. Factors affecting public and private allocation of resources for provision of needed facilities.

844. Recreation Research Methods
Winter. 4(4-0) Approval of department. Relate research to broader context of social scientific investigation and to the nature and philosophy of social scientific research. Examine theoretical and methodological approaches in research research.
608. Pathology Clerkship  
Fall, Winter, Spring, Summer. 3 to 17 credits. May reenroll for a maximum of 17 credits. Grade P in all courses offered in terms 1 through 8. 
Anatomic and clinical pathology, with emphasis on clinical-pathological correlations. Conducted in the pathology departments of affiliated hospitals.

651. Veterinary Clinical Pathology Clerkship  
Fall, Winter, Spring, Summer. 4 credits. Satisfactory completion of term 8 of the professional veterinary curriculum, approval of department. 
Concepts in laboratory interpretation and diagnosis.

652. Veterinary Necropsy Clerkship  
Fall, Winter, Spring, Summer. 4 credits. Satisfactory completion of term 8 of the professional veterinary curriculum, approval of department. 
Supervised necropsy and interpretation of findings.

656. Problems in Veterinary Necropsy  
Fall, Winter, Spring, Summer. 4 credits. PTH 652, approval of department. 
Problems related to necropsy and interpretation of findings.

657. Laboratory Animal Medicine Clerkship  
(SSEM 651) Fall, Winter, Spring, Summer. 4 credits. Satisfactory completion of term 8 of the professional veterinary curriculum, approval of department. 
Supervised laboratory animal management, medicine and surgery.

800. Problems in Pathology  
Fall, Winter, Spring, Summer. Variable credit. Approval of department. 
Elective work for students in veterinary medicine interested in pathology as a specialty, or in the special pathology of diseases of a particular class or species, and for graduate minors and majors interested in pathological techniques or in non-thesis research.

801. Pathology Seminar  
Fall, Winter, Spring, Summer. 1(1-0) May reenroll for a maximum of 3 credits for M.S. candidates and 6 credits for Ph.D. candidates. Approval of department. 
Seminar required of all majors in pathology.

502. Advanced Histopathology  
Fall. 5(6-0) Approval of department. 
A relatively advanced and comprehensive study in the histopathologic aspects of systemic and special pathology, independent study in the field of pathogenesis and microscopic pathology.

803. Advanced Histopathology  
Winter. 5(6-0) PTH 802 and approval of department. 
Continuation of PTH 802.

805. Pathology Proseminar  
Fall. 2(2-0) Approval of department. 
Philosophy and methods of research; theses and other research reports. Literature review; illustration of research data; practical assignments.

810. Postmortem Diagnosis  
Fall, Spring. 3(0-9) May reenroll for a maximum of 6 credits. Approval of department. 
Required of majors. 
Instruction and practice in diagnosis of animal diseases by means of necropsy and other laboratory techniques. Emphasis will be placed upon correlation and interpretation of gross and microscopic lesions and results of other tests.

811. Advanced Clinical Pathology  
Spring of even-numbered years. 3(1-6) Approval of department. 
Application of standard and newer techniques and instrumentation in hematology, biochemistry, parasitology, etc., to the diagnosis of disease.

812. Hematology  
Fall. 3(4-0) PTH 406 or approval of department. 
Pathology of diseases of blood and an analysis of diagnostic laboratory procedures.

820. Oncology  
Spring. 3(6-0) Approval of department. 
A study of benign and malignant neoplasms with emphasis on gross and microscopic characteristics and diagnosis.

826. Laboratory Animal Pathology  
Winter of even-numbered years. 4(4-0) Medical degrees, approval of instructor. 
Macro and microscopic studies on the diseases of laboratory animals.

899. Master's Thesis Research  
Fall, Winter, Spring, Summer. Variable credit. Approval of department.

980. Histopathologic Diagnosis  
Fall, Winter, Spring, Summer. 3(0-9) May reenroll for a maximum of 6 credits. PTH 803, PTH 820. 
Trimming, histopathologic examination, description, diagnosis and reporting of specimens from biopsy and necropsy.

990. Advanced Correlative Pathology  
Fall, Winter, Summer. 5(0-15) May reenroll for a maximum of 15 credits. Approval of department. 
Experience in morphologic and clinical pathology and correlation of these with the clinical aspects of disease.

999. Doctoral Dissertation Research  
Fall, Winter, Summer. Variable credit. Approval of department.

600. Pathology Clerkship  
(0 of 652.) Fall, Winter, Spring, Summer. 6 or 8 credits. Grade P in all courses offered in terms 1 through 8 or approval of department. 
Practical clinical exposure in the area of pediatrics. Program developed to achieve proficiency in motor skills and aptitudes; comprehension of concepts and principles; patient evaluation, diagnosis, management and therapy.

620. Directed Studies  
Fall, Winter, Spring, Summer. 2 to 24 credits. PED 600 or approval of department. 
Study in general or specialty pediatrics.

PEDIATRICS AND HUMAN DEVELOPMENT  
PHD  
(Name changed July 1, 1979. Formerly Department of Human Development.) 
College of Human Medicine

520. Genetics Clinic  
Fall, Winter, Spring, Summer. 1 to 3 credits. May reenroll for a maximum of 9 credits. 
Students will interview and examine patients with heritable disorders, perform related laboratory diagnostic procedures, and participate in genetic counseling conferences and discussions.

531. Medical Genetics  
Fall. 1(1-0) Admission to a college of medicine or approval of department. 
Basic genetic principles and their application to clinical medicine, prenatal genetic diagnosis, exercises in genetic counseling and the importance of relevant laboratory tests.

532. Phenomena of Development  
Fall. 5(5-0) PHD 531 or approval of department. 
Normal psychological and physical development of the human including intellectual, social, emotional and endocrinological growth from infancy through adolescence. Clinical examples highlight variations from the normal course of development.

590. Special Problems in Human Development  
Fall, Winter, Spring, Summer. 1 to 6 credits. May reenroll for a maximum of 12 credits. Human Medicine students or approval of department. 
Each student will work under direction of a staff member on an experimental, theoretical or applied problem.

607. Ambulatory Care Clerkship  
Fall, Winter, Spring, Summer. 1 to 3 credits. May reenroll for a maximum of 6 credits. H M 602. Interdepartmental with the departments of Community Health Science, Family Practice, and Medicine. Administered by the Department of Family Practice. 
Outpatient experience, lasting an equivalent of 48 half days over a period of six months or more, emphasizing continuous and comprehensive patient care under the supervision of appropriate physicians.