FORESTRY (FOR)

111: Introduction to Forestry and Wildlife Management. 4-1-2. An introduction to forest resources management and utilization.

201: Microcomputer Applications. 0-3-3. Introduction to microcomputers with specific applications in filing conventions, word processing, spreadsheets, electronic communications, and other topics.

202: Forest Fire. 0-2-2. Fire; its' role in ecosystems, use in management, and control.

220: Problems. 1-3 semester hours credit (6). Special problems in forestry and wildlife conservation correlated with management of natural resources.

230: Biology of Forest Plants. 0-3-3. Preq., BISC 101 or 130 or 134. The classification, structure, function, and basic physiological processes in principle forest plants.

231: Dendrology I. 4-0-1. Preq., BISC 130 or 134 or 216, or FOR 230, or WILD 230. The identification of woody plant species found in north central Louisiana using leaves, twigs, buds, fruit, flowers, and form.

232: Dendrology II. 4-0-1. Preq., FOR 231 or WILD 231. A continuation of Dendrology I with the identification of woody plant species found in north central Louisiana using leaves, twigs, buds, fruit, flowers, and form.

233: Dendrology III. 4-0-1. Preq., FOR 232 or WILD 232 or consent of instructor. Plant classification, nomenclature, and silvics of important tree species native of North America.

300: Forest Soils. 3-2-3. Preq., CHEM 100 or 120, or permission of instructor. Physical, chemical and biological properties of forest soils and associated management problems with an emphasis on site productivity and sustainability.

301: Forestry Ecology. 4-2-3. Preq., FOR 115 or WILD 115 or FOR 230 or WILD 230 and FOR 300. Ecological factors affecting the growth and development of trees and stands

302: Silviculture I. 4-2-3. Preq., FOR 301 or BISC 313 or ENSC 313. An in-depth study of practices used in forest stands to regenerate, cultivate, and harvest them.

306: Forest Measurements I. 4-2-3. Preq., AGSC 320 or STAT 200 or QA 233 or PSYC 300, or equivalent statistics course. Principles of sampling and measuring trees, area, forest stands, growth, and land productivity.

310: Forest Sustainability and Recreational Use. 4-1-2. Practices and techniques that support sustainable forestry and recreational use of southern forests.

312: Forest and Forest Products Entomology. 0-2-2. Preq., FOR 115 or WILD 115 or FOR 230 or WILD 230. Study of important insects affecting pine, hardwood, and urban trees in the South, including a basic overview of insects in relation to the Animal Kingdom.

313: Forest and Forest Products Pathology. 4-2-3. Preq., FOR 115 or WILD 115 or FOR 230 or WILD 230. The important diseases of forests and forest products.

315: Forest Measurements II. 4-2-3. Preq., FOR 306. Execution of forest surveys; techniques of growth measurement; determination of volume of trees and stands.

318: Forest Operations. 3-2-3. Study of mechanized forest operations including all functions

from timber felling to delivery of product to mill. Logging safety. Machinery costs. Forest road engineering.

319: Forest Products Manufacturing. 3-0-1. An in-depth look at the manufacturing processes used to produce the major forest products and tours of selected production facilities.

320: Silviculture II.
8-0-2. Preq., FOR 302. The practice of silviculture field procedures used in the southern forest to regenerate and grow tree stands.

401: Forest Management. 0-3-3. Preq., FOR 406 and 425. Managing forest properties to meet landowner objectives using growth and yield models, optimization techniques, best management practices, and sound business principles.

402: Watershed Management. 3-2-3. Preq., FOR 300 and 301, or permission of instructor. Water resources and problems. Emphasis on the forest hydrologic system and its management. (G)

404: Wood Technology and Products. 3-2-3. Preq., FOR 116 or WILD 116 or FOR 232 or WILD 232. Formation, structure, identification and properties of commercial woods plus an overview of the manufacturing processes used to produce the major forest products. (G)

406: Forest Economics/Valuation. 0-3-3. Preq., FOR 310, 315, 320, and GISC 224. Economics and financial principles as a basis for decision making in forestry. (G)

417: Bottomland Hardwoods. 4-2-3. Preq., FOR 320. Silviculture and utilization of bottomland hardwoods.

420: Problems. 1-3 semester hours credit (9). Special problems in forestry and wood utilization correlated with management of land and natural resources.

425: Forest Growth and Yield. 0-3-3. Preq., FOR 315. Concepts, theories, and parameters involving the development and use of growth models; emphasizing applications to forest growth projections and management.

427: Advanced Forest Soils and Nutrition. 0-3-3. Preq., FOR 300 or PLSC/ENSC 310. Forest soils' properties and processes. Nutrient availability, uptake and allocation. Long-term, sustainable productivity.

428: Wetland Ecology. 4-2-3. Preq., FOR 301 or BISC 313 or ENSC 313 or equivalent. Study of wetland characteristics and the ecological processes occurring within wetlands. Wetland delineation, restoration, construction and regulation will also be covered. Cannot be taken for credit if student has credit for BISC 428 or ENSC 428 or WILD 428.

430: Tech Honduras I. 3-0-1. Preq., Consent of Instructor. Relationships between people, landscapes, and their associated natural resources. Topics include cultural awareness, sustainable development, ecotourism, deforestation, and other related issues in Central America.

431: Tech Honduras II. 3-1-2. Preq., Consent of Instructor. Continuation of FOR 430 that includes travel portion of course sequence: relationships between people, landscapes, and associated natural resource use from a firsthand international perspective.

456: Senior Exit Exam. 4-0-1. Preq., FOR 401. Comprehensive review of Forestry program couse content prior to final comprehensive examination.

460: Forest Ecophysiology. 3-2-3. Preq., FOR 301 or BISC 313 or ENSC 313. Basic woody plant structure, growth, and metabolism and how they are affected by genetics, silvicultural practices, and environment.

478: Practica/Internship/Cooperative Education in Forestry. 1-9 hours credit (9). (Pass/Fail). Preq., Junior standing, 2.0 cumulative GPA, and approval of Forestry Experiential Education Coordinator. On site, supervised, structured work experiences. Application and supervision fee required.

480: Professional Practice. 9-0-3. Preq., FOR 401. Integrated formulation, calculation, execution, and implementation of multiple-use forest resources management plans incorporating ethical, biological, quantitative, economic, social, and administrative constraints. Contempetency exam.

528: Advanced Wetland Ecology. 4-2-3. Study of wetland characteristics and the ecological processes occurring within wetlands. Wetland delineation, restoration, construction and regulation will also be covered. Credit will not be given for FOR 528 if credit is given for BISC 528

GEOGRAPHIC INFORMATION SCIENCE (GISC)

224: GPS in Natural Resource Management. 4-1-2. Preq., GISC 250. Introduction to global positioning systems (GPS).

250: Introduction to Geographic Information Systems (GIS).
3-2-3. An introduction to GIS focusing on geographic concepts, data analysis, and understanding GIS software.

260: Remote Sensing of Natural Resources.
3-2-3. Principles, methods, and applications of remote sensing relevant to forestry, wildlife, and other natural resources management fields.

341: Computer Cartography.
3-2-3. Preq., GISC 250. Elements of map interpretation and construction: creation, manipulation, and analysis of spatially defined data. Also listed as GEOG 341.

350: Intermediate Geographic Information Systems (GIS).
3-2-3. Preq., GISC 250, 260. Intermediate geographic information systems technology focusing on theoretical, technical, and applied aspects of analytical GIS.

360: Geographic Information Systems (GIS) Spatial Statistics.
0-2-2. Preq., GISC 250. The course provides an introduction to spatial statistical methods used in GIS analysis of spatial data.

371: Advanced Geographic Information Systems (GIS) and Spatial Analysis.
3-2-3. Preq., GISC 350. Advanced techniques in geographic information systems, integrated with intermediate level spatial analysis.

420: Problems in Geographic Information Science. 1-3 semester hours credit (6). Special problems in GIS, spatial data, remote sensing and other areas of Geographic Information Science.

460: Computer Programming for Geographic Information Systems (GIS) I.
3-2-3. Preq., GISC 371. Visual basic programming skills to support GIS and database applications.

461: Computer Programming for Geographic Information Systems (GIS) II.
3-2-3. Preq., GISC 460. A continuation of GISC 460. Programming GIS using a modern programming language.

462: Geographic Information Systems (GIS) Spatial Database Applications I.

3-2-3. Preq., GISC 371. Expansion on GIS theory, database design, development, management, and analysis.

463: Geographic Information Systems (GIS) Spatial Database Applications II.
3-2-3. Preq., GISC 462. A continuation of GISC 462.

464: GIS Application Project.
12-0-4. Preq., GISC 461, 463. Students must solve a problem using spatial data and the analysis capabilities of GIS.

WILDLIFE HABITAT MANAGEMENT

111: Introduction to Forest and Wildlife Management. 4-1-2. Survey of forest and wildlife habitat distribution, history, policies, management, and utilization.

230: Biology of Forest Plants. 0-3-3. Preq., BISC 101 or 130 or 134. The classification, structure, function, and basic physiological processes in principle forest plants.

231: Dendrology I. 4-0-1. Preq., BISC 130 or 134 or 216, or FOR 230, or WILD 230. The identification of woody plant species found in north central Louisiana using leaves, twigs, buds, fruit, flowers, and form.

232: Dendrology II. 4-0-1. Preq., FOR 231 or WIID 231. A continuation of Dendrology I with the identification of woody plant species found in north central Louisiana using leaves, twigs, buds, fruit, flowers, and form.

233: Dendrology III. 4-0-1. Preq., FOR 232 or WILD 232 or consent of instructor. Plant classification, nomenclature, and silvics of important tree species native of North America.

314: Wildlife Habitat Evaluation and Management. 4-2-3. Habitat requirements, evaluation, and management for wildlife.

347: Wildlife Techniques. 4-2-3. Techniques used in the management of wildlife and their habitat, including capture, identification, and population estimation.

428: Wetland Ecology. 4-2-3. Preq., FOR 301 or BISC 313 or ENSC 313 or equivalent. Study of wetland characteristics and the ecological processes occurring within wetlands. Wetland delineation, restoration, construction and regulation will also be covered. Cannot be taken for credit if student has credit for BISC 428 or ENSC 428 or FOR 428.

445: Forest Ecosystem Management. 4-2-3. Forest ecosystems of the South, their history, function, components, protection, and management. (G)

456: Senior Exit Exam. 4-0-1. Preq., WILD 445. Comprehensive review of Wildlife Habitat Management program course content prior to final comprehensive examination.

480: Professional Practice. 9-0-3. Preq., WILD 445. Integrated formulation, calculation, execution, and implementation of multiple-use forest resource management plans incorporating ethical, biological, quantitative, economic, social, and administrative constraints.