

CLEMSON UNIVERSITY
FOREST RESOURCE MANAGEMENT
Bachelor of Science
Land Surveying Emphasis Area

Freshman Year

First Semester

- 3 - BIOL 103 General Biology I
- 1 - BIOL 105 General Biology Lab. I
- 4 - CH 105 Chemistry in Context I¹
- 1 - E N R 101 Intro. to Env.. & Natural Res. I
- 3 - MTHSC 102 Intro. to Math. Analysis
- 3 - Oral Communication Requirement²

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Second Semester

- 3 - BIOL 104 General Biology II
- 1 - BIOL 106 General Biology Lab. II
- 4 - PHYS 200 Introductory Physics
- 3 - ENGL 103 Accelerated Composition
- 3 - EX ST 301 Introductory Statistics
- 1 - F N R 102 FNR Freshman Portfolio

15

Sophomore Year

First Semester

- 4 - F N R 204 Soil Information Systems
- 2 - FOR 205 Dendrology
- 3 - FOR 221 Forest Biology
- 3 - Arts and Humanities (Literature) Req.²
- 3 - Economics Requirement³

15

Second Semester

- 3 - ENGL 314 Technical Writing
- 3 - FOR 206 Forestry Ecology
- 3 - Arts and Humanities (Non-Lit.) Req.²
- 3 - Social Science Requirement²
- 2 – E G 210 Engineering Graphics for Civil Engineering

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Forestry Summer Camp

- 2 - FOR 251 Forest Communities
- 1 - FOR 252 Forest Operations
- 4 - FOR 253 Forest Mensuration
- 1 - FOR 254 Forest Products

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Junior Year

First Semester

- 2 - FOR 302 Forest Biometrics
- 3 - FOR 304 Forest Resource Economics
- 3 - FOR 341 Wood Proc. Pract. in For. Ind.
- 4 - FOR 413 Integrated Forest Pest Mgmt
- 3 - FOR 434 GIS for Landscape Planning

15

- 3 – FNR 490 -- Summer Internship (must be land surveying)

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Second Semester

- 2 - FOR 308 Remote Sensing in Forestry
- 3 - FOR 408 Wood and Paper Products
- 3 - FOR 418 Forest Resource Valuation
- 4 - FOR 465 Silviculture
- 2 – AG M 221 Surveying: Earthwork and Area Measurements

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Senior Year

First Semester

- 4 - FOR 410 Harvesting Processes
- 3 - FOR 416 Forest Policy and Admin.
- 3 - FOR 417 Forest Res. Mgt. and Reg.
- 2 - FOR 431 Rec. Res. Plan. in Forest Mgt.
- 3 – FOR 433 GPS Applications

15

Second Semester

- 1 - F N R 499 Natural Resources Seminar
- 2 - FOR 406 Forested Watershed Mgmt.
- 3 - FOR 415 Forest Wildlife Management
- 2 - FOR 425 Forest Resource Mgmt. Plans
- 1 - FOR 498 Senior Portfolio
- 3 – B E 322 Small Watershed Hydrology & Sedimentology
- 3 – LAW 333 Real Estate Law

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130 Total Semester Hours

AG M 221 Surveying: Earthwork and Area Measurements 2(1,3)

Fundamentals of surveying relative to earthwork and land area measurements including linear measurements, leveling, angular measurements, and computations. Levels and total stations are used with an introduction to GPS. Preq: MTHSC 102 or 106 or consent of instructor.

E G 210 Engineering Graphics for Civil Engineering 2(1,3) Introduction to engineering graphics principles for civil engineers. Sketching and CAD tools are used to visualize, communicate, and perform graphical analysis of civil engineering problems. Credit toward a degree will be given for only one of E G 208, 209, or 210. Coreq: ENGR 130 or 141.

FOR 308 Remote Sensing in Forestry 2(1,3) Introduction to remote sensing, aerial photo interpretation, computer mapping, aerial photo timber estimating, and geographical information systems. Preq: Forestry summer camp or consent of instructor.

FOR 433, 633 GPS Applications 3(2,3) Develops competence in global positioning system (GPS) technology including theory, methods, and application to natural resources mapping. Topics include basic concepts of GPS; projection systems; types of data; mission planning; and data capture, correction, and export to geographical information systems (GIS). Preq: Senior standing or consent of instructor.

FOR (E N R) 434, 634 Geographic Information Systems for Landscape Planning 3(2,3) Develops competence in geographic information systems (GIS) technology and its application to various spatial analysis problems in landscape planning. Topics include data development and management, spatial analysis techniques, critical review of GIS applications, needs analysis and institutional

context. GIS hardware and software, hands-on application. Credit may be received for only one of C R P 434, FOR (E N R) 434.

B E 322 Small Watershed Hydrology and Sedimentology 3(3,0) Fundamental relationships governing rainfall disposition are used as bases for defining the hydrology of watersheds. Emphasizes application of modeling techniques appropriate for runoff and sediment control. Preq: PHYS 122. Coreq: C E 321 or CSENV 202.

LAW 333 Real Estate Law 3(3,0) The nature of real property and means of acquiring rights therein: conveyance of ownership, creation and execution of deeds, mortgages, etc., landlord and tenant relationships, shared concepts, and government regulation.

F N R 490 Field Training in Natural Resources 3(0,9) Four to eight week internship in which students work in natural resources. Students have supervised management responsibility. Total of 135 hours required. Must be arranged at least two months in advance. To be taken Pass/Fail only. Preq: Senior standing in Environmental and Natural Resources, Forestry, or Wildlife and Fisheries Biology, or consent of instructor.

For more information about the program and Clemson's admission qualifications, you may contact Dr. Pat Layton, Department of Forestry and Natural Resources, PLAYTON@exchange.clemson.edu.