COLLEGE OF NATURAL RESOURCES AND ENVIRONMENT
Department of Forest Resources and Environmental Conservation
Bachelor of Science in Forestry and Wildlife
Major: Forestry
Option: Urban Forestry
For Students Graduating in Calendar Year 2016

Name: ___________________________  Student ID: _______________________

Advisor: _________________________  Expected graduation date: __________

Minimum credit hours required for graduation is 120.

Major Core Degree Requirements (21 credits)

Forest Science (9 credits)
  _ FOR 2214 Introduction to Land and Field Measurements (3 credits)
  _ FOR 2314 Forest Biology and Dendrology (2 credits)
  _ FOR 2324 Dendrology Lab (1 credit)
  _ FOR 3314 Forest Ecology and Silvics (3 credits) or FOR 3364 Forest Ecology and
    Sustainability (3 credits)

Environmental Economics (3 credits -- choose one)
  _ FOR 4014 Natural Resources Economics (3 credits)
  _ FOR 4424 Forest Economics and Management (3 credits)

Policy (3 credits)
  _ FOR 4454 Urban Forest Management and Policy (3 credits)

Oral Communication (3 credits -- choose one)
  _ AEE 3634 Communicating Agriculture and Life Sciences in Speaking (3 credits)
  _ COMM 2004 Public Speaking (3 credits)
  _ FOR 3524 Environmental Interpretation (3 credits)

Geospatial Analysis (3 credits -- choose one)
  _ FOR 4114 Information Technology for Natural Resources Management (3 credits)
  _ FOR 4214 Forest Photogrammetry and Data Analysis (3 credits)
  _ GEOG 4084 Introduction to Geographic Information Systems (3 credits)
  _ GEOG 4354 Introduction to Remote Sensing (3 credits)

Option Requirements (15 credits)
  _ CSES 3134 Soils in the Landscape (3 credits)
  _ FOR 3354 Urban Forestry and Arboriculture (3 credits)
  _ FOR 3454 Urban Forestry Field Lab (1 credit)
  _ FOR 4514 Forest and Tree Pests (3 credits)
  _ NR 1114 Introduction to Renewable Natural Resources (2 credits)
  _ Physical Science Elective (3 credits -- choose one)
    _ BIOL 1106 Principles of Biology (3 credits)
    _ BIOL 2304 Plant Biology (3 credits)
    _ CHEM 1036 General Chemistry (3 credits)
    _ GEOS 1004 Physical Geology (3 credits)
Restricted Electives (36 credits – see accompanying lists)

___ Advanced Forestry and Environmental Science Restricted Elective (9 credits)
___ Applied Horticulture Restricted Elective (6 credits)
___ Botany Restricted Elective (6 credits)
___ Finance & Business Restricted Elective (3 credits)
___ Pest Mgt. Restricted Elective (3 credits)
___ Policy, Law, & Planning Restricted Elective (6 credits)
___ Written Communication Restricted Elective (3 credits)

CLE Requirements (36 credit hours)

Area 1: Writing and Discourse (6 credit hours required)
___ ENGL 1105 First-Year Writing (3 credits)
___ ENGL 1106 First-Year Writing (3 credits)

Area 2: Ideas, Cultural Traditions, and Values (6 credit hours required)
___ FOR 2554 Nature & American Values (3 credits)
___ CLE Area 2 course: ____________________________ (3 credits)

Area 3: Society and Human Behavior (6 credit hours required)
___ AAEC 1005 Economics of the Food & Fiber System or ECON 2005 Principles of Economics (3 credits)
___ CLE Area 3 course: ____________________________ (3 credits)

Area 4: Scientific Reasoning and Discovery (8 credit hours required)
___ BIOL 1105 Principles of Biology (3 credits)
___ BIOL 1115 Principles of Biology Lab (1 credit)
___ CHEM 1035 General Chemistry (3 credits)
___ CHEM 1045 General Chemistry Lab (1 credit)

Area 5: Quantitative and Symbolic Reasoning (6 credit hours required)
___ MATH 1016 Elementary Calculus with Trigonometry I (3 credits)
___ MATH 2015 Elementary Calculus with Trigonometry II (3 credits)

Area 6: Creativity and Aesthetic Experience (1 credit hour required)
___ CLE Area 6 course: ____________________________ (1 credit)

Area 7: Critical Issues in a Global Context (3 credit hours required)
___ CLE Area 7 course: ____________________________ (3 credits)

Free Electives (12 credit hours)

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<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
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<tbody>
<tr>
<td>CSES 4774</td>
<td>Reclamation of Drastically Disturbed Lands (pre-req.: CSES 3134)</td>
<td>3</td>
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<tr>
<td>ENSC 3644</td>
<td>Plants for Environmental Restoration (co-req.: CSES 3114)</td>
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<tr>
<td>FIW 2114</td>
<td>Principles of Fisheries and Wildlife (CLE 7)</td>
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<tr>
<td>FOR 2514</td>
<td>Wildland Fire: Ecology and Management</td>
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<td>FOR 3214</td>
<td>Forest Biometrics (pre-req.: FOR 2214, MATH 2015)</td>
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<tr>
<td>FOR 3324</td>
<td>Silviculture Principles and Applications (pre-req.: FOR 3314)</td>
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<td>FOR 3544</td>
<td>Outdoor Recreation Management (pre-req.: FOR 2554)</td>
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<tr>
<td>FOR 4334</td>
<td>Principles of Agroforestry</td>
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<tr>
<td>FOR 4354</td>
<td>Forest Soils and Hydrology (pre-req.: FOR 3314)</td>
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<tr>
<td>FOR 4374</td>
<td>Forested Wetlands (pre-req.: CSES 3134)</td>
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<tr>
<td>CSES 2564</td>
<td>Turfgrass Management</td>
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<tr>
<td>FOR 2254</td>
<td>Arboriculture Field Skills</td>
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<tr>
<td>HORT 2134</td>
<td>Plants and Greenspaces in Urban Communities</td>
<td>3</td>
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<tr>
<td>HORT 2154</td>
<td>Spanish for the Green Industry</td>
<td>3</td>
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<tr>
<td>HORT 2224</td>
<td>Horticulture Science and Industry</td>
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<td>HORT 2244</td>
<td>Plant Propagation</td>
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<td>HORT 3544</td>
<td>Landscape Construction</td>
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<td>HORT 3584</td>
<td>Landscape Practicum</td>
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<tr>
<td>HORT 3644</td>
<td>Landscape Establishment &amp; Management (pre-req.: FOR 2234)</td>
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<tr>
<td>HORT 4205</td>
<td>Public Gardens Maintenance and Management (pre-req.: HORT 3325, 3644)</td>
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<tr>
<td>HORT 4614</td>
<td>Ornamental Plant Production &amp; Market (pre-req.: HORT 2234, 2244; AAEC 2434)</td>
<td>3</td>
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<tr>
<td>BIOL 3204</td>
<td>Plant Taxonomy (pre-req.: BIOL 2304)</td>
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<tr>
<td>HORT 3325</td>
<td>Woody Landscape Plants I</td>
<td>3</td>
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<tr>
<td>HORT 3326</td>
<td>Woody Landscape Plants II</td>
<td>3</td>
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<tr>
<td>PPWS 2104</td>
<td>Plants, Genes, and People (CLE 7)</td>
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<tr>
<td>PPWS 3504</td>
<td>Plant Physiology and the Biotic Environment (pre-req.: BIOL 1006, CHEM 1036)</td>
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<tr>
<td>PPWS 4504</td>
<td>Fundamentals of Plant Physiology (pre-req.: BIOL 1006, CHEM 1036)</td>
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<tr>
<td>AAEC 2434</td>
<td>Foundations in Agribusiness (pre-req.: AAEC 1005)</td>
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<tr>
<td>AAEC 3324</td>
<td>Environment Sustainable Development Economics (pre-req.: AAEC 1005)</td>
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<tr>
<td>AAEC 3454</td>
<td>Small Business Management</td>
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<tr>
<td>ACIS 2115</td>
<td>Principles of Accounting</td>
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<tr>
<td>FIN 3055</td>
<td>Legal Environment of Business (junior standing)</td>
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<tr>
<td>FIN 3104</td>
<td>Introduction to Finance (junior standing; pre-req.: ACIS 2115)</td>
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<tr>
<td>MGT 3304</td>
<td>Management Theory and Leadership Practice (junior standing)</td>
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<tr>
<td>MKTG 3104</td>
<td>Marketing Management (junior standing)</td>
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### Pest Management Restricted Electives

- **ENT 4254** Insect Pest Management 3
- **FIW 4454** Vertebrate Pest Management (senior standing) 3
- **PPWS 4104** Plant Pathology 3
- **PPWS 4754** Weed Science (pre-req.: BIOL 2304, CHEM 1036) 3

### Policy, Law, and Planning Restricted Electives

- **GEOG 3244** The U.S. City 3
- **AAEC 3314** Environmental Law (CLE 7) 3
- **AAEC 4754** Real Estate Law (junior standing) 3
- **BC 3116** Building Culture, a History of Construction II (CLE 2, 6) 3
- **HIST 3156** History of American Cities II (CLE 3) 3
- **LAR 2xxx** Any 2000-level course or higher 3
- **PSCI 3344** Global Environmental Issues (pre-req.: complete Are 4 CLE) 3
- **PSCI 3424** State and Local Government (pre-req.: PSCI 1014) 3
- **UAP 1024** Urban Public Issues (CLE 3) 3
- **UAP 2004** Principles of Real Estate 3
- **UAP 2014** Urbanization and Development (CLE 3) 3
- **UAP 3434** Public Administration (pre-req.: PSCI 1014) 3
- **UAP 4264** Environmental Ethics (CLE 2) (pre-req.: UAP 3354) 3
- **UAP 4344** Law of Critical Environmental Areas 3
- **UAP 4374** Land Use and Environment (junior standing) 3

### Written Communication Restricted Electives

- **AEE 3624** Communicating Agriculture in Writing 3
- **ENGL 3104** Introduction to Professional Writing 3
- **ENGL 3534** Literature and Ecology (CLE 2, 7) 3
- **ENGL 3764** Technical Writing 3
- **ENGL 3774** Business Writing 3
- **FOR 3574** Environmental Education Service Learning 3
- **HUM 3204** Multicultural Communication (CLE 7) 3

**IMPORTANT NOTES ON THE FOLLOWING PAGE.**
URBAN FORESTRY NOTES

1. **Satisfactory Progress:** By the end of academic year in which the student has attempted 60 hours (including transfer, advanced placement, advanced standing, and credit by examination), “satisfactory progress” towards a B.S. degree in the College of Natural Resources and Environment will include the following minimum criteria:
   - Having an in-major and overall grade point average (GPA) of at least 2.0.
   - Passing at least 24 semester credits that apply to the *Curriculum for Liberal Education (CLE)*.
   - Passing the following courses or their equivalents:
     - BIOL 1105, 1115, and either 1106, 1116 or 2304
     - CHEM 1035, 1045 and CHEM 1036 or GEOS 1004
     - MATH 2015

2. **Foreign Language Requirement:** A sequence of two (2) foreign language courses is required for graduation unless two (2) high school credits of the same foreign language or six (6) transfer credit hours of foreign language have been earned. These credits do not count toward graduation. See catalog section on “Graduation Requirements”.

3. **Policy on Student Exchanges:** Studying overseas or at another U.S. university is a wonderful opportunity to enhance your education. However, planning for an exchange should begin at least 9 months prior to leaving. This will allow time to determine what substitutions, if any, will be allowed and time to arrange your schedule at Virginia Tech to ensure that all requirements for graduation are met.

4. **In-Major GPA Computation:** In-major GPA computation includes all courses designated as FIW, FOR, GEOG, NR, and SBIO.

5. An in-major and overall GPA of at least 2.0 is required for graduation.