

# Curriculum in Forestry, 2016-2017 Catalog

## **Cr. Core Degree Requirements**

### **13 Interpersonal and Public Communication Skills**

ENGL 150, 250 (with grades of C or better); a communications elective (ENGL 302 or 309 or 312 or 314); LIB 160; SP CM 212 (with a grade of C or better)

### **22 Mathematical, Physical and Life Sciences**

AGRON 154; BIOL 211, 211L; CHEM 163, 163L; MATH 140, 150; STAT 101 or 104

### **30 Forestry**

FOR 201, 202, 203, 204, 205, 206, 302, 451, 454; NREM 110, 120, 211

### **15 University and College Required Electives**

Three credits in each of the following five areas:

**Ethics** (see: <http://www.cals.iastate.edu/student-services/ethics> for current list);

**Humanities** (see: <https://www.cals.iastate.edu/student-services/humanities> for current list);

**Social Sciences:** SOC 134 or SOC 230

**U.S. Diversity** (see: <http://www.registrar.iastate.edu/students/div-ip-guide/usdiversity-courses> for current list); and

**International Perspectives** (see: <http://www.registrar.iastate.edu/students/div-ip-guide/IntlPerspectives-current> for current list).

**R Practical experience requirement** (NREM 104). See <<http://www.nrem.iastate.edu/workexperience>> for details.

**Cr. Options** - Students are expected to choose one of the following options, or areas of specialization, by the end of their sophomore year. Please refer to specific option sheets for course requirements and details.

### **35 Forest Ecosystem Management**

The Forest Ecosystem Management option concentrates on management of the complete forest ecosystem. It deals with the spectrum of forestland use from wilderness preservation to timber harvest to supply the nation's demand for wood products. Students in this option study forest biology, ecology, and management, including recreational use, water quality, timber production, prescribed burns and wildlife habitat.

### **34 Interpretation of Natural Resources**

The Interpretation of Natural Resources option concentrates on natural history, earth science and communication techniques with the basic forestry education background. Students in this option will learn to communicate environmental information and values with the public.

### **44 Natural Resource Conservation and Restoration**

The Natural Resource Conservation and Restoration option concentrates on the management of natural resources other than timber harvest. Students learn about the care of forests and natural areas with an emphasis on ecosystem conservation and preservation, environmental benefits and human impact.

### **29 Sustainable Materials Science and Technology**

The Sustainable Materials Science and Technology option concentrates on the development and use of wood products ranging from structural lumber to veneer to paper products that we depend on every day. Students in this option study the anatomical, physical and chemical properties of wood and different wood processing operations.

### **37 Urban and Community Forestry**

The Urban and Community Forestry option concentrates on the management of trees in urban settings such as city parks, greenbelt areas and boulevards. Students learn to implement site assessments, long-term management plans and pest management along with effectively communicating with their peers and the public.

## **4 – 19 Free Electives**

## **128 Total Credits**

## Suggested Course Sequence \*

### Freshman Year

#### FALL

|              |                              |    |
|--------------|------------------------------|----|
| Biol 211     | Principles of Biology        | 3  |
| Biol 211L    | Prin. of Biology Lab.        | 1  |
| NREM 110     | Orientation in NREM          | 1  |
| Engl 150     | Critical Thinking & Comm     | 3  |
| Math 140     | College Algebra <sup>a</sup> | 3  |
| NREM 120     | Intro. Renew. Resources      | 3  |
| Soc Elective | Intro. to Sociology          | 3  |
|              |                              | 17 |

#### SPRING

|               |                       |    |
|---------------|-----------------------|----|
| Math 150      | Math for Bus & Soc Sc | 3  |
| Chem 163      | General Chemistry     | 4  |
| Chem 163L     | General Chemistry Lab | 1  |
| Stat 101      | Intro. To Statistics  | 4  |
| Lib 160       | Library Instruction   | 1  |
| Free Elective |                       | 3  |
| NREM 211      | Careers in Nat. Res   | 1  |
|               |                       | 17 |

### Sophomore Year

|         |                                      |    |
|---------|--------------------------------------|----|
| For 201 | Forest Biology <sup>b</sup>          | 2  |
| For 202 | Wood Utilization <sup>b</sup>        | 2  |
| For 203 | Res. Meas./Eval. <sup>b</sup>        | 2  |
| For 204 | Ecosys. Decision-making <sup>b</sup> | 2  |
| For 205 | Integrated Forestry Lab <sup>b</sup> | 3  |
| For 206 | Fall Forestry Camp <sup>b</sup>      | 4  |
|         |                                      | 15 |

|                           |                          |    |
|---------------------------|--------------------------|----|
| Sp Cm 212                 | Fund. of Public Speaking | 3  |
| Engl 250                  | W/O/V/E Communications   | 3  |
| Biol 212, 212L or For 280 |                          | 4  |
| Required Elective         |                          | 3  |
| Agron 154                 | Fund. of Soil Science    | 3  |
|                           |                          | 16 |

### Junior Year\* Senior Year\*

\* Students are required to complete the core curriculum courses suggested for the freshman and sophomore years before declaring an option. The academic adviser will review the student's coursework and must approve the option before it will be recognized by the department.

- a. Initial math course is determined on the basis of high school math and placement test scores. A non-credit math course (Math 10) may be required at additional cost.
- b. Students enroll only in the designated Forestry courses for fall semester of the sophomore year. These courses will be interrupted during the semester for the three-week Fall Forestry Camp (FOR 206). A special course fee will be assessed for the Fall Camp.

Note: Students must demonstrate communication proficiency by earning a grade of C or better in 6 credits of written composition and 3 credits of speech fundamentals.