

COLLEGE OF NATURAL RESOURCES

Bachelor of Science in Forestry
for students graduating in 2008

Environmental Resource Management Option

| Fall Semester | | | | | Spring Semester | | | | |
|--|------|--|----|--|--|------|--|----|--|
| Freshman Year | | | | | | | | | |
| Biol | 1105 | Principles of Biology (CA4) | 3 | | Biol | 1106 | Principles of Biology (CA4) | 3 | |
| Biol | 1115 | Principles of Biology Lab (CA4) | 1 | | Biol | 1116 | Principles of Biology Lab (CA4) | 1 | |
| Chem | 1035 | General Chemistry | 3 | | Restricted Elective ^c (Physical Science) | | | 3 | |
| Chem | 1045 | General Chemistry Lab | 1 | | Engl | 1106 | Freshman English (CA1) | 3 | |
| Engl | 1105 | Freshman English (CA1) | 3 | | Math | 2015 | Elem. Calculus w/Trig. II (CA5) | 3 | |
| NR | 1114 | Intro. to Renewable Nat. Res.* | 2 | | Core elective Area 2 | | | 3 | |
| Math | 1016 | Elem. Calculus w/ Trig. I ^a (CA5) | 3 | | | | | | |
| | | | 16 | | | | | 16 | |
| Sophomore Year | | | | | | | | | |
| FiW | 2114 | Princ. of Fish. & Wildl. Mgt. (CA7) | 3 | | CSES | 3134 | Soils in the Landscape | 3 | |
| For | 2214 | Intro. Forest Measurements* | 3 | | Geos | 2104 | Elements of Geology* | 3 | |
| For | 2314 | Forest Biology/Dendrology | 2 | | Restricted Elective ^c | | | 3 | |
| For | 2324 | Dendrology (Fall or Spring) | 1 | | Core elective Area 2 | | | 3 | |
| AAEc | 1005 | Economics of Food & Fiber (CA3) ^b | 3 | | Core elective Area 3 | | | 3 | |
| Restricted Elective ^c | | | 3 | | Free Elective | | | 3 | |
| Core elective Area 6 | | | 1 | | | | | | |
| For. Measure. kit required; approx. cost \$200. | | | 16 | | | | | 18 | |
| Junior Year | | | | | | | | | |
| Comm | 2004 | Public Speaking | 3 | | For | 3216 | Forest Measurements | 3 | |
| For | 3215 | Forest Measurements | 3 | | For | 3324 | Silvic. Principles & Applic. | 4 | |
| For | 3314 | Forest Ecology & Silvics (WI)* | 3 | | For | 3544 | Outdoor Recreation Mgt. | 3 | |
| Restricted Elective ^c (Economic) | | | 3 | | 2005 Spring Camp will cost approximately \$550-600. | | | | |
| Restricted Elective ^c | | | 3 | | For | 3224 | Forest Measurements Field Lab | 1 | |
| Writing Intensive Elective (students entering VT prior to Fall 05) | | | 3 | | For | 3334 | Silviculture Field Lab | 1 | |
| | | | 18 | | For | 3434 | Forest Management Field Lab | 1 | |
| | | | | | For | 3344 | Forestry Field Studies <small>pass/fail only</small> | 1 | |
| | | | | | | | | 14 | |
| Senior Year | | | | | | | | | |
| For | 4354 | Forest Soils and Hydrology* | 3 | | For | 4444 | Integrated Forest Mgt. Practicum | 3 | |
| Restricted Elective ^c | | | 3 | | FiW | 4434 | Wildlife Habitat Ecology & Mgt. | 3 | |
| Restricted Elective ^c | | | 3 | | Restricted Elective ^c | | | 3 | |
| Restricted Elective ^c | | | 3 | | Free Elective | | | 3 | |
| Restricted Elective ^c | | | 3 | | Free Elective | | | 3 | |
| | | | 15 | | | | | 15 | |
| Total Credits for Graduation = 128 | | | | | | | | | |

* Must schedule lab

^a Assumes completion of college algebra, functions, exponentials, and logarithms, matrices, sequences, and series in high school. If not, must also take Math 1015 for background. Must take Math 1016 before taking Math 2015.

^b Or Econ 2005 Principles of Economics

^c Students must select restricted electives from the attached list. Consult your advisor. Plan ahead, recognizing that some restricted elective courses are not offered every semester. We recommend you schedule the economic, analytic and soil science restricted electives for a fall semester because most courses are not taught during the spring.

THE NOTATIONS ON THE REVERSE SIDE ARE AN INTEGRAL PART OF THIS CHECKSHEET.

ENVIRONMENTAL RESOURCE MANAGEMENT NOTES

1. Satisfactory Progress

By the end of the semester 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 will include the following minimum criteria:

- * Having an in-major and overall grade point average of at least 2.0
- * Passing at least 24 semester credits that apply to the university core curriculum
- * Passing the following courses, or their equivalents: Biol 1105, 1106 and 1115, 1116; Chem 1035, 1036; and Math 2015

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."

2. A variety of on-line resources also can be used to attain computer proficiency. Competencies in these skills will be expected in upper-level courses.

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. You must complete an Exchange Program checklist (available in 138 Cheatham Hall) and obtain the required signatures before beginning the exchange program.

4. Required courses should be taken in the **sequence** shown to ensure that prerequisites are met.

5. In-major GPA Computation

- Includes all courses designated as FIW, FOR, GEOG, NR and WOOD.

6. An in-major and overall GPA of 2.0 is required for graduation.

7. Forestry majors entering Virginia Tech prior to Fall 2005 are required to take Forest Ecology and Silvics (FOR 3314) and one additional WI of their choice to complete the writing intensive requirement. Students will also gain extensive experience in writing, speaking and use of visual media throughout the curriculum including: Introduction to Forest Measurements (FOR 2214), Silviculture: Principles and Applications (FOR 3324), Forest Soils and Hydrology (FOR 4354), and Integrated Forest Management Practicum (FOR 4444). These and other classes will fulfill the ViEWS communications intensive requirement for students entering Virginia Tech in Fall 2005 or later.

ERM Restricted Electives

Analytic/Computer (select 3 credits from the following):

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|-----------|--|
| Geog 4084 | Intro. to GIS |
| For 4214 | Forest Photogrammetry |
| For 4114 | Information Technologies for Natural Resource Management |

Environmental Economics (select 3 credits from the following):

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|-----------|---|
| Econ 4014 | Environmental Economics |
| AAEC 4304 | Environment & Sustainable Development Economics |
| For 3424 | Forest Resource Economics |

Environmental Values (select 3 credits from the following):

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| For 2554 | Nature and American Values (can also count as a Core Area 2) |
| Hist 3144 | American Environmental History |

Law (select 3 credits from the following):

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|-----------|-------------------------------------|
| AAEC 3314 | Environmental Law |
| AAEC 3604 | Agricultural Law |
| Fin 3055 | Legal Environment of Business |
| UAP 4754 | Legal Foundations of Planning |
| UAP 4344 | Law of Critical Environmental Areas |

Policy and Planning (select 6 credits from the following):

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|----------|---|
| For 4424 | Forest Resource Management |
| For 4434 | Forest Resource Policy (also can count as Writing Intensive course) |
| UAP 3354 | Intro. to Environmental Policy and Planning |
| UAP 4184 | Community Involvement and Public Participation |
| UAP 4374 | Land Use, Environmental Planning, and Policy |
| UAP 4384 | Pollution Control Planning and Policy |
| ALS 4614 | Watershed Assessment, Management and Policy |

Resources (select 6 credits from the following):

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|----------|--|
| FiW 4454 | Vertebrate Pest Management |
| FiW 4614 | Fish Ecology |
| For 3354 | Urban Forestry |
| For 3524 | Environmental Interpretation |
| For 3564 | Recreation Planning |
| For 4364 | Advanced Silviculture and Vegetation Management |
| For 4374 | Forested Wetlands (cannot count in two areas) |
| LAR 4144 | Landscape Perception and Assessment |
| For 4984 | Environmentally Sensitive Harvesting |
| For 4334 | Agroforestry (cannot count in two areas) |
| For 4454 | Urban Forest Management and Policy |
| For 2514 | Wildland Fire: Ecology and Management |

Soils (select 3 credits from the following)

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|-----------|--|
| CSES 4124 | Soil Survey and Taxonomy |
| CSES 4214 | Soil Fertility and Management |
| For 4374 | Forested Wetlands (cannot count in two areas) |
| For 4334 | Agroforestry (cannot count in two areas) |

Physical Science (select 3 credits from the following)

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|-----------|-----------------------------|
| CHEM 1036 | General Chemistry II |
| PHYS 1055 | Introduction to Astronomy I |
| PHYS 2205 | General Physics I |
| GEOS 1014 | Earth Through Life and Time |