FOREST RESOURCES AND CONSERVATION | WATERSHED SCIENCE AND MANAGEMENT

Providing students with a solid understanding of ecology, this major prepares students to manage and develop forest areas for economic, recreational, and ecological purposes. Forest Resources and Conservation students study natural resource management and analysis, soil and water sciences, plant identification, law and policy, fire management, and natural resource economics.

About this Program

• **College:** Agricultural and Life Sciences (http://catalog.ufl.edu/UGRD/colleges-schools/UGAGL)
• **Degree:** Bachelor of Science in Forest Resources and Conservation
• **Credits for Degree:** 120
• **Contact:** Email (khaselier@ufl.edu?Subject=Forest Resources and Conservation Major)
• **Additional Information**
• **Related Forest Resources and Conservation Programs**

To graduate with this major, students must complete all university, college, and major requirements.

Specializations

**Forest Resource Management**
Accredited by the Society of American Foresters and is for students seeking careers as professional forest resource managers who apply science-based strategies to managing publicly and privately-owned forest lands.

**Urban Forestry**
Accredited by the Society of American Foresters and is for students with interests in forest management in the typically local-scale forests in urban-suburban landscapes, and at the interface of urban and undeveloped lands.

**Environmental Pre-Law**
Accredited by the Society of American Foresters and provides a solid basis of forest and natural resources science and management upon which is built a broad introduction to the policies, ethics, and processes affecting the use of natural resources.

**Protected Areas Management**
Accredited by the Society of American Foresters and is for students interested in managing lands for conservation and restoration purposes, usually on public lands managed by the government or by lands owned by private conservation organizations.

**Recreation Resources Management**
Accredited by the Society of American Foresters and focuses on the sustainable management of recreation lands as a natural resource and understanding human dimensions as related to their use.

**Forest Business Management**
Accredited by the Society of American Foresters and gives students a sound background in natural resource management and a broad introduction to business as appropriate for students interested in consulting, real estate or working for forest industry.

**Watershed Science and Management**
Prepares students to address the many and varied management issues associated with water resources, including wetlands, soils, policy, and water quality.

**Related Forest Resources and Conservation Programs**

- **Combined Degree** (http://catalog.ufl.edu/UGRD/academic-programs/combined-degrees)
- **Forest Resources and Conservation minor** (http://catalog.ufl.edu/UGRD/colleges-schools/UGAGL/FRC_UMN)
- **Bachelor of Science in Natural Resource Conservation** (http://catalog.ufl.edu/UGRD/colleges-schools/UGAGL/NRC_BSF)

**Watershed Science and Management**
This specialization prepares students to address the many and varied management issues associated with water resources, including wetlands, soils, policy, and water quality.

**Critical Tracking**

Note that critical tracking is the same for all specializations of this major.

Critical Tracking records each student’s progress in courses that are required for entry to each major. Please note the critical-tracking requirements below on a per-semester basis.

Equivalent critical-tracking courses as determined by the State of Florida Common Course Prerequisites (http://www.flvc.org/cpp/displayRecord.jsp?cip=030501&track=02) may be used for transfer students.

**Semester 1**

- Complete 1 of 7 critical-tracking courses: AEB 2014 or ECO 2013 or ECO 2023, AEC 3030C or SPC 2608, AEC 3033C, BSC 2010/BSC 2010L, CHM 1030 or CHM 2045, MAC 1105, STA 2023
- 2.5 GPA required for all critical-tracking courses
- 2.0 UF GPA required
Semester 2
- Complete 2 additional critical-tracking courses
- 2.5 GPA required for all critical-tracking courses
- 2.0 UF GPA required

Semester 3
- Complete 2 additional critical-tracking courses
- 2.5 GPA required for all critical-tracking courses
- 2.0 UF GPA required

Semester 4
- Complete 2 additional critical-tracking courses
- 2.5 GPA required for all critical-tracking courses
- 2.0 UF GPA required

Semester 5
- Complete all 7 critical-tracking courses
- 2.5 GPA required for all critical-tracking courses
- 2.0 UF GPA required

Model Semester Plan
To remain on track, students must complete the appropriate critical-tracking courses, which appear in bold. These courses must be completed by the terms as listed above in the Critical Tracking criteria.

This semester plan represents an example progression through the major. Actual courses and course order may be different depending on the student's academic record and scheduling availability of courses. Prerequisites still apply.

Course Title Credits
Semester One
IDS 1161 What is the Good Life (Gen Ed Humanities) 3
Select one:
CHM 1030 Basic Chemistry Concepts and Applications 1 (Critical Tracking; Gen Ed Biological and Physical Sciences) 3
CHM 2045 General Chemistry 1 (Critical Tracking; State Core Gen Ed Biological and Physical Sciences) 3
State Core Gen Ed Composition (http://catalog.ufl.edu/UGRD/academic-programs/general-education/#genedcoursestext); Writing Requirement 3
FOR 2662 Forests for the Future (Gen Ed Social and Behavioral Sciences; recommended course) 3
Elective 3

Semester Two
BSC 2010 & 2010L Integrated Principles of Biology 1 and Integrated Principles of Biology Laboratory 1 (Critical Tracking; State Core Gen Ed Biological and Physical Sciences) 4
MAC 1105 Basic College Algebra (Critical Tracking; or higher; State Core Gen Ed Mathematics) 3
FAS 2024 Sustainable Fisheries (recommended elective) 3

State Core Gen Ed Social and Behavioral Sciences (http://catalog.ufl.edu/UGRD/academic-programs/general-education/#genedcoursestext) Elective 3

Semester Three
AEC 3033C Research and Business Writing in Agricultural and Life Sciences (Critical Tracking; Writing Requirement) 1 3
STA 2023 Introduction to Statistics 1 (Critical Tracking; Gen Ed Mathematics) 3
FOR 2662 Forests for the Future (recommended, if not already taken) 2 3
Gen Ed Composition 3
Elective 3

Semester Four
Select one: 3-4
AEC 3030C Effective Oral Communication (Critical Tracking) 3
ECO 2013 Principles of Macroeconomics (Critical Tracking) 3
ECO 2023 Principles of Microeconomics (Critical Tracking; Gen Ed Social and Behavioral Sciences) 3

Summer After Semester Four
FOR 3200C Foundations of Natural Resources and Conservation (Summer B only) 3
FOR 3434C Forest Resources Information Systems (Summer B only) 3

Semester Five
FNR 3131C Dendrology/Forest Plants 3
FNR 3410C Natural Resource Sampling 3
FOR 3153C Forest Ecology 3
SWS 3022 Introduction to Soils in the Environment 3
SWS 3022L Introduction to Soils in the Environment Laboratory (optional) 0-1

Semester Six
Credits 12-13
FOR 3162C Silviculture 4
FOR 3202 Society and Natural Resources 3
GEO 3250 Climatology 3
GLY 2010C Physical Geology 4

Semester Seven
FNR 4461 Spatial Models and Decision Analysis 3
FNR 4660 Natural Resource Policy and Economics 3
FOR 4020 Seminar in Contemporary Issues in Forest Resources and Conservation 1
Management and social dimensions elective 3
Physical dimensions elective 3

Credits 13

Semester Eight
FNR 4343C Forest Water Resources 3
FNR 4345 Models for Water Resources 1
FNR 4623C Integrated Natural Resource Management 3
FOR 3214 Fire Ecology and Management 2
FOR 3214L Fire Ecology and Management Laboratory 0-1 (optional)
Chemical and biological dimensions elective 3
Management and social dimensions elective 3

Credits 15-16
Total Credits 120

Placement tests and/or prerequisites may be necessary for access to certain courses.

Course availability may necessitate departure from this course sequence. Except for certain courses where sequence is important, successful completion is more important than the sequence in which the courses are taken.

The summer term between the junior and senior year is normally reserved for professional work experience. For questions regarding opportunities, email (khaselier@ufl.edu?Subject=Forest Resources and Conservation Major) the SFRC Student Services office.

Academic Learning Compact
The forest resources and conservation major provides a broad education in the ecological, economic and social aspects of forest and natural resources and their management. The major also provides national accreditation from the Society of American Foresters.

Before Graduating Students Must
- Pass the forest resources and conservation competency exam, given in five parts. One part will be given in each of these required courses:
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<th>Code</th>
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- Complete requirements for the baccalaureate degree, as determined by faculty.

Students in the Major Will Learn to
Student Learning Outcomes (SLOs)

Content
1. Demonstrate competency in biology/ecology, quantification, policy/administration and management of forest and related natural resources.

2. Analyze, interpret, synthesize and communicate information and data, including the use of mathematical and statistical methods.

Critical Thinking
3. Solve novel problems in forest and natural resource management.

Communication
4. Create, interpret and analyze written text, oral messages and multimedia presentations.

Curriculum Map
I = Introduced; R = Reinforced; A = Assessed

<table>
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<tr>
<th>Courses</th>
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Assessment Types
- Final group project
- Exams
- Program exit exam