# FOREST RESOURCES AND CONSERVATION

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%20Resources%20and%20Conservation%20Major)
- · More Info

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

### **School Information**

The School of Forest, Fisheries, and Geomatics Sciences is a unit within the Institute of Food and Agricultural Sciences (IFAS) and the College of Agricultural and Life Sciences (CALS). The school is home to three distinct yet integrated program areas: Fisheries and Aquatic Sciences (http://sfrc.ufl.edu/fish/), Forest Resources and Conservation (http://sfrc.ufl.edu/forest/), and Geomatics (http://sfrc.ufl.edu/geomatics/). The school's faculty, staff, and students conduct research, teaching, and extension that cuts across a wide range of environments and disciplines.

Website (http://sfrc.ufl.edu/)

#### CONTACT

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P.O. Box 110410 1745 McCarty Drive 136 NEWINS-ZIEGLER HALL GAINESVILLE FL 32611-0410 Map (http://campusmap.ufl.edu/#/index/0832)

#### Curriculum

- · Combination Degrees
- · Fire Ecology and Management Certificate
- · Fisheries and Aquatic Sciences Minor
- · Forest Health Management Certificate
- · Forest Resources and Conservation
- · Forest Resources and Conservation Minor
- Geomatics
- · Geomatics Certificate
- · Mapping with Small Unmanned Aerial Systems Certificate
- · Natural Resource Conservation

The Forest Resources and Conservation major prepares students to sustainably manage forests to meet some combination of ecological, economic, and social/recreational objectives. Graduates are commonly employed in managing public or private land, in areas such as timber management, habitat restoration, outdoor recreation management, environmental law and policy, and similar.

Coursework is diverse, with an emphasis on field experiences which give students hands-on exposure to topics in ecology and biology, economics, administration and planning, and the use of various tools and techniques to manage forests to meet society's needs. Students have the option to complete a certificate in Fire Ecology and Management, Urban Forestry, Recreation Resource Management, or Environmental Policy, Law, and Regulation. This major is accredited by the Society of American Foresters.

#### **Critical Tracking**

Critical Tracking records each student's progress in courses that are required for progress toward 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 (https://cpm.flvc.org/advance-search/) 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: 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 3

- Complete 2 additional 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 4

- · Complete all remaining critical-tracking courses
- · 2.5 GPA required for all critical-tracking courses
- · 2.0 UF GPA required

## Semester 5

- Complete 5 of the required major courses: FNR 3131C, FNR 3002C, FNR 3410C, FNR 3602 or FNR 4080, FNR 3500C, FNR 3003C, FNR 4660, FNR 3020, FNR 4343C, FNR 4623C, FNR 3400C, FNR 3622, FNR 3133C, SWS 3022, FNR 3411, FNR 4080, FNR 4621, FNR 4624C, FNR 4620C.
- · 2.0 upper division GPA required
- · 2.0 UF GPA required

## Semester 6

- Complete 5 of the required major courses: FNR 3131C, FNR 3002C, FNR 3410C, FNR 3602 or FNR 4080, FNR 3500C, FNR 3003C, FNR 4660, FNR 3020, FNR 4343C, FNR 4623C, FNR 3400C, FNR 3622, FNR 3133C, SWS 3022, FNR 3411, FNR 4080, FNR 4621, FNR 4624C, FNR 4620C.
- · 2.0 upper division GPA required
- · 2.0 UF GPA required

## Semester 7

- Complete 5 of the required major courses: FNR 3131C, FNR 3002C, FNR 3410C, FNR 3602 or FNR 4080, FNR 3500C, FNR 3003C, FNR 4660, FNR 3020, FNR 4343C, FNR 4623C, FNR 3400C, FNR 3622, FNR 3133C, SWS 3022, FNR 3411, FNR 4080, FNR 4621, FNR 4624C, FNR 4620C.
- · 2.0 upper division GPA required
- 2.0 UF GPA required

## Semester 8

- Complete all remaining required major courses: FNR 3131C, FNR 3002C, FNR 3410C, FNR 3602 or FNR 4080, FNR 3500C, FNR 3003C, FNR 4660, FNR 3020, FNR 4343C, FNR 4623C, FNR 3400C, FNR 3622, FNR 3133C, SWS 3022, FNR 3411, FNR 4080, FNR 4621, FNR 4624C, FNR 4620C.
- · 2.0 upper division GPA required
- · 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		
Semester One		2	
Quest 1 (Gen Ed Humanities)		3	
Select one:	Davis Chamistry Concents and Applications 1 (Critical Tracking) Con Ed Dislogical and	3	
CHM 1030	Basic Chemistry Concepts and Applications 1 ( <b>Critical Tracking</b> ; Gen Ed Biological and Physical Sciences)		
CHM 2045	General Chemistry 1 (Critical Tracking; State Core Gen Ed Biological and Physical Sciences)		
FNR 2062		3	
State Core Gen Ed Composition (http://	catalog.ufl.edu/UGRD/academic-programs/general-education/#genedcoursestext); Writing	3	
Requirement			
Elective		3	
	Credits	15	
Semester Two			
BSC 2010	Integrated Principles of Biology 1	4	
& 2010L	and Integrated Principles of Biology Laboratory (Critical Tracking; State Core Gen Ed		
	Biological and Physical Sciences)		
FAS 2024	Sustainable Fisheries (recommended elective)	3	
MAC 1105	Basic College Algebra (Critical Tracking; State Core Gen Ed Mathematics)	3	
State Core Gen Ed Social and Behaviora	al Sciences (http://catalog.ufl.edu/UGRD/academic-programs/general-education/	3	
#genedcoursestext)			
Elective		3	
	Credits	16	
Semester Three			
AEC 3033C	Research and Business Writing in Agricultural and Life Sciences ( <b>Critical Tracking</b> ; Writing Requirement) <sup>1</sup>	3	
STA 2023	Introduction to Statistics 1 (Critical Tracking; Gen Ed Mathematics)	3	
Gen Ed Composition	minoduoninto otanonoo i (eminomining) oon 22 maniomanoo,	3	
Gen Ed Social & Behavioral Sciences		3	
Elective		2	
	Credits	14	
Semester Four			
Quest 2 (Gen Ed Physical Sciences)		3	
Select one:		3-4	
AEB 2014	Current Economic Issues, Food and You (Critical Tracking)		
ECO 2013	Principles of Macroeconomics (Critical Tracking)		
ECO 2023	Principles of Microeconomics (Critical Tracking; Gen Ed Social and Behavioral Sciences)		
Select one:		3	
AEC 3030C	Effective Oral Communication (Critical Tracking)		
SPC 2608	Introduction to Public Speaking (Critical Tracking)		
FAS 2024	Sustainable Fisheries (recommended elective, if not already taken)	3	
State Core Gen Ed Humanities (http://c	atalog.ufl.edu/UGRD/academic-programs/general-education/#genedcoursestext)	3	
	Credits	15-16	
Summer After Semester Four			
FNR 3002C	Foundations of Natural Resources and Conservation (Critical Tracking; Summer B only)	1	
FNR 3400C	Forest Resources Information Systems (Critical Tracking; Summer B only)	3	
	Credits	4	
Semester Five			
FNR 3020	Professional Practice in Natural Resources	1	
FNR 3131C	Dendrology/Forest Plants	3	
FNR 3133C	Tree Biology (Critical Tracking)	3	
FNR 3410C	Natural Resource Sampling	3	
FNR 3500C	Forest Ecology (Critical Tracking)	3	
Semester Six	Credits	13	
FNR 3411	Forest Mensuration	3	
FNR 3003C	Silviculture (Critical Tracking)	4	
FNR 4510	Global Forests	3	
or FNR 3602	or Society and Natural Resources	_	
FNR 4660	Natural Resource Policy and Economics	3	
SWS 3022	Introduction to Soils in the Environment	3	
	Credits	16	
		-	

#### Semester Seven

FNR 4080	Sustainable Ecotourism Development	3
FNR 4621	Forest Economics and Management	3
FNR 4624C	Field Operations for Management of Ecosystems (Critical Tracking)	3
Certificate coursework or advis	4	
	Credits	13
Semester Eight		
FNR 3622	Fire Ecology and Management	2
FNR 4343C	Forest Water Resources	3
FNR 4620C	Forest Health Management	3
FNR 4623C	Integrated Natural Resource Management (Critical Tracking)	3
Certificate coursework or advis	3	
	Credits	14
	Total Credits	120-121

#### **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:

Code	Title	Credits
FNR 3131C	Dendrology/Forest Plants	3
FNR 3410C	Natural Resource Sampling	3
FNR 4040C		
FNR 4623C	Integrated Natural Resource Management	3
FNR 4660	Natural Resource Policy and Economics	3

· 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

Courses	SL0 1	SL0 2	SL0 3	SL0 4
FNR 3131C	1			I
FNR 3410C	1			
FNR 4343C	R	R		R
FNR 4623C	R		A	A
FNR 4660	1		R	R
FOR 3153C	1	1	R	1
FOR 3162C	R	R		R
FOR 3200C	1	1	1	1
FOR 3202	1		R	R
FOR 3214	R	R	R	R

FOR 3434C I I

FOR 4020 R R

# **Assessment Types**

- Final group project
- Exams
- Program exit exam