Date:	November 29. 2022
Department:	SRM

Curriculum Title: Forest Ecosystem Science

For Minor Changes in existing c	urriculum (check all that apply):
revised courses	change in total cr. hrs.
new course sequence	☐ new program objectives*
□ new courses added	new accreditation/assessment requirements
*See SUNY Guidelines	

# 1. Rationale for Change

Please provide an explanatory narrative outlining the rationale for the change, and the impacts of this change on the learning outcomes of the curriculum:

Minor change to accommodate new SUNY General Education Framework by adding new DEISJ requirement.

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Current Curriculum					Proposed change
FOUNDATION COURSES (W	ith suggested ESF classes)	SUNY GER	Credits	Credits	
English I	EWP190 Writing & the Environment	Basic Comm.	3		
English II	EWP290 Research, Writing & Humanities	Humanities	3		
Biology I (w/lab)	EFB101/102 General Biology I	Natural Science	4		
Biology II (w/lab)	EFB103/104 General Biology II	Natural Science	4		
Chemistry I (w/lab)	FCH110/111 Survey of Chemical Principles	Natural Science	4		
Chemistry II (w/lab)	FCH152/153 General Chemistry II	Natural Science	4		
Ecology	FOR232 Natural Resources Ecology	Natural Science	3		
Physics (w/lab)	PHY101 Major Concepts in Physics I	Natural Science	4		
Calculus	APM105 Survey of Calc & Applications	Math	4		
Statistics	APM391 Intro. to Probability & Statistics	Math	3		
Economics	FOR207 Intro. to Economics	Social Science	3		
Prin. of Management	FOR360 Principles Manage. for Env. Prof.		3		
General Education		DEISJ		3	Add Gen Ed DEISJ course,
0 151 1	6   16   10   10   10   10   10   10   1			_	add 3 credits
General Education	Select from two (2) of five (5) subject area	s varies	6	3	Change to "Select from one
					(1) of four (4) subject
					areas", reduce to 3 credits
	Mi	nimum Credit Hours	49	49	
FES PROFESSIONAL COURSI	ES		Credits		
EFB336 Dendrology			3		
ESF300 Introduction to	Geospatial Information Technologies		3		
FOR132 Freshman orier	ntation seminar		1		
FOR304 Adirondack Fie	ld Studies		4		
FOR313 Tree Structure	and Function		3		
FOR322 Natural Resour	ces Measurements and Sampling		3		
FOR324 Forest Biometr	ics		3		
FOR332 Forest Ecology			4		
FOR334 Silviculture			4		
FOR345 Introduction to Soils			3		
FOR465 Natural Resources Policy			3		
FOR492 Capstone Research in Forest Ecosystem Science			3		
FOR493 Capstone Synthesis in Forest Ecosystem Stewardship			3		
Biophysical Sciences Dir		12			
• •	an Dimensions Directed Electives		9		
· ·		nimum Credit Hours	61		
		Free Electives	14		
	TOTAL REQUIRE	FOR GRADUATION	124		-
	TOTAL NEQUINE	GRADOATION	127		

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# 2. Institutional Impact:

### Changes from existing condition:

Anticipated Enrollment or Enrollment Change: 0

Faculty or Staffing Requirements: 0

Technology, Computing Resources, and Classroom Resource Demands: None

Change in Accreditation Requirements: None

Changes to Assessment Plan: None

Library Resource Requirements: None

# 3. Catalog Narrative:

Please attach to this proposal form a copy of the current catalog description in MS Word format, with revisions shown in "track changes".

See next pages

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## **Bachelor of Science in Forest Ecosystem Science**

### www.esf.edu/fnrm/fes

The Forest Ecosystem Science degree is based on a vision that combines professional competency in forest management skills with an enhanced understanding of ecological sciences. Students interested in this program typically are drawn to natural settings and environments, enjoy nature, and want to understand how forested ecosystems work. ESF provides a wide variety of opportunities to meet student needs utilizing 25,000 acres of forest lands as teaching laboratories. Internships with natural resource-based organizations in the business, public and nonprofit sectors provide additional hands-on experiences. Experiential field learning is combined with learning concepts and skills in the classroom and laboratory on ESF's Syracuse campus.

The undergraduate curriculum in forest ecosystem science consists of two broad categories of courses. The first category, general education, provides students with knowledge and skills that are useful and important for all educated persons regardless of their profession as well as preparation for advanced courses leading to a specific profession. The second category, professional courses, provides students with direct preparation for a career. The first two years of college usually focus on general education and the second two on the professional studies.

The FES program allows students to obtain the professional skills that employers look for in new employees and a deeper understanding of the scientific basis of those skills. These skills are developed through a combination of core courses focusing on biology, ecology, ecosystems, and management. The forest ecosystem science degree offers a wide variety of employment opportunities. Graduates work throughout the United States in public agencies, private industry, and for nonprofit organizations. They also are well prepared to enter graduate programs in management of forest and natural resources, ecological research, or other areas of applied forest biology.

Forest ecosystem science offers a wide variety of employment opportunities. Graduates work throughout the United States in public agencies, private industry, and for nonprofit organizations. They also are well prepared to enter graduate programs in management of natural resources, ecological research, or other areas of applied forest biology.

The educational program, leading to the professional Bachelor of Science degree in Forest Ecosystem Science, is accredited by the Society of American Foresters (SAF) under Forestry.

### **Lower Division Required Courses**

<u> </u>		
Course	Codes*	Credits

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APM 105	Survey of Calculus and Its Applications I	G	4
APM 391	Introduction to Probability and Statistics	G	3
EFB 101	General Biology I: Organismal Biology and Ecology	G	3
EFB 102	General Biology I Laboratory	G	1
EFB 103	General Biology II: Cell Biology and Genetics	G	3
EFB 104	General Biology II Laboratory	G	1
ESF 200	Information Literacy		1
EWP 190	Writing and the Environment	G	3
EWP 290	Research Writing and Humanities	G	3
FCH 150	General Chemistry I	G	3
FCH 151	General Chemistry Laboratory I	G	1
FCH 152	General Chemistry II	G	3
FCH 153	General Chemistry Laboratory II	G	1
FOR 132	Orientation Seminar: Sustainable Resources Management		1
FOR 207	Introduction to Economics	G	3
FOR 232	Natural Resources Ecology	G	3
FOR 332	Forest Ecology		4
FOR 360	Principles of Management		3
PHY 101	Major Concepts of Physics I		4

### **Upper Division Required Courses**

	Course Codes* (		dits
EFB 336	Dendrology		3
ESF 300	Introduction to Geospatial Information Technologies		3
FOR 304	Adirondack Field Studies	S	4
FOR 313	Tree Structure and Function		3
FOR 322	Natural Resources Measurements and Sampling		3
FOR 323	Forest Biometrics		3
FOR 334	Silviculture		4
FOR 345	Introduction to Soils		3

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FOR 465	Natural Resources Policy	3
FOR 492	Capstone Research in Forest Ecosystem Science	3
FOR 493	Capstone Synthesis in Forest Ecosystem Stewardship	3

### **Elective Courses**

	Course	Codes*	Credits
Directed Electives: Biophysical Science		PE	12
Directed Electives: Management and Human Dimensions		PE	9
Free Electives			14
<u>ESF XXX</u>	Diversity, Equity, Inclusion and Social Justice course (TBD)	<u>G</u>	<u>3</u>
General Education - Select at least two-one from the following five-subject areas: American History, Foreign Language, The Arts, Western Civilization, Other World Civilizations US History and Civic Engagement, The Arts, World History and Global Awareness, World Languages		<del>y,</del> G	<del>6</del> 3

Students should consult with their advisors and read the Sustainable Resources Management Handbook for lists of courses that can be elected to meet degree requirements.

**Total Minimum Credits For Degree: 124** 

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### 4. Curriculum Transition Plan:

Please provide a narrative description of your plan for transitioning from your existing curriculum to the proposed new curriculum. Please provide specific dates for implementing curriculum changes, overlap periods where old and new curricula may exist simultaneously, and final phase out of old curricula. Please also include impacts and mitigating considerations for transfer students and students in midprogram during implementation, impacts of changes in semester delivery of existing courses, addition of new courses within a particular semester, etc.

All FES students entering the program in Fall 2023 will be required to satisfy the requirements of the new curriculum. Existing students have the option to remain in the curriculum that existed when they entered ESF, or switch to the new curriculum.

### 5. Approval Signatures:

Signatures below, or attached letters, indicate that the affected departments, programs or units have been notified of this proposal and have had an opportunity to assess the impact of the proposal on their respective units. If departments did not respond to your notification, you may wish to document your effort to contact them.

## Affected Academic Department(s) or Program(s): Department/Program 1 Name of Chair/Program Director Or letter attached Chair Signature Date Name of Chair/Program Director Department/Program 2 Or letter attached $\square$ Chair Signature Date Department/Program 3 Name of Chair/Program Director Or letter attached Chair Signature Date [if more/ess than three Departments/Programs, please add/delete lines as appropriate. **Other Units** Or letter attached Library Director Date

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		Or letter attached
Computing and Network Services	Date	
Physical Plant	Date	Or letter attached
Forest Properties	Date	Or letter attached
Environmental Health and Safety	Date	Or letter attached □
Admissions	Date	Or letter attached 🗌
Other	Date	Or letter attached 🗌
Otjer	Date	Or letter attached
Office of the Provost		
Signature below, or attached letter, indicates that the Provost eith for additional resources from the College; or b) indicates willingned department.		
Provost Signature	Date	Or letter attached □

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# 6. Proposer Information and Department Chair Affirmation:

Contact Person:	
Name: Eddie Bevilacqua	Department: SRM
Email: ebevilacqua@esf.ed	Phone: x6697
have been notified and given made available to support the	wed and approved by the sponsoring Department. Affected departments the opportunity to provide feedback. Department resources are or will be s curriculum revision, or a plan is in place to meet the resource needs as mpacts section of this proposal (see Section 2, above).
Name: Chris Nowak Dep	Date: rtment Chair (or designated curriculum representative)
Signature:	Or letter attached I

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# 7. Final Approvals: Curriculum Committee Date Faculty Governance Date

Date

**Provost** 

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