

B.S. Applied Ecology & Environmental Science – Terrestrial Ecology

This is not an official list of degree requirements. Adjustments may be required due to curriculum changes.

First Year

Fall

Course	Prerequisite	Credit
FW1050 – Natural Resource Professional (<i>Essential Education: Seminar</i>)		2
FW2010 – Vegetation of North America		4
FW2051 – Field Techniques		2
BL1400 – Principles of Biology (<i>Essential Education: Science</i>)		3
BL1410 – Principles of Biology Lab	BL1400 (C)	1
UN1015 – Composition (<i>Essential Education</i>)		3
Total		15

Spring

Course	Prerequisite	Credit
CH1150 – University Chemistry I (<i>Essential Education: STEM</i>)	Math Placement	3
CH1151 – University Chemistry I lab	CH1150 (C)	1
MA1135 – Calculus for Life Science (<i>Essential Education: Math</i>)	Math Placement	4
<i>Essential Education: Foundations of the Human World</i>		3
<i>Essential Education: SHAPE</i>		3
<i>Essential Education: Activities</i>		1
Total		15

Second Year

Fall

Course	Prerequisite	Credit
FW3020 – Forest Ecology	FW2010 (C), FW2051 (C)	3
FW3330 – Soil Science (<i>Essential Education: STEM</i>)	CH1150/51	4
MA2720 – Statistical Methods	MA1030 or MA1032	4
PH1110 – College Physics I	MA1031 or MA1032 or placement	3
PH1111 – College Physics I Lab	PH1110 (C)	1
<i>Essential Education: Arts & Culture</i>		3
Total		18

Spring

Course	Prerequisite	Credit
FW3200 – Biometrics & Data Analysis	FW2051 & MA2720	4
FW3540 – Intro to GIS	MA2720 (C)	4
BL2160 – Botany		4
<i>Essential Education: Communication Intensive</i>		3
Total		15

Third Year

Fall

Course (taken as block at Ford Center)	Prerequisite	Credit
FW3012 – Survey of Silviculture	FW2010 & FW2051	2
FW3170 – Land Measurements/GPS	FW3540	1
FW3180 – Geomorphology, Landscapes, and Ecosystems		2
FW3190 – Multi-Resource Assessment	FW2051 & FW3020 & FW3200	3
FW3600 – Wildlife Habitat		3
FW3800 – Insect Ecology		2
FW3840 – Forest Health		3
Total		16

Spring

Course	Prerequisite	Credit
FW4421 – Climate Change & Forests		3
FW4710 – Environmental Biogeochemistry	CH1150	3
Free Elective		3
<i>Essential Education: Experience</i>		3
<i>Essential Education: Intercultural Competency</i>		3
<i>Essential Education: Activities</i>		1
Total		16

Fourth Year

Fall

Course	Prerequisite	Credit
FW4800 – Communications for Nat Res		2
BL3490 – Principles of Ecology & Evolution	BL1400/1410	4
Applied Ecology Directed Elective	Varies	3
Free Elective		3
<i>Essential Education: Activities</i>		1
Total		13

Spring

Course	Prerequisite	Credit
FW4370 – Forestry and Landscape Hydrology		3
Applied Ecology Directed Elective	Varies	3
Applied Ecology Directed Elective	Varies	3
Free Elective		3
Total		12

Directed Electives Choose at least 9 Cr		
Course #	Course Title & Credits	Semester / Prereqs
BL4034	Advanced Evolutionary Ecology (3)	Fall-odd yrs / BL3490
BL4400	Microbial Ecology (3)	Fall-even yrs / BL3490
BL4461	Ecosystem Ecology (3)	On Demand / BL3490 & (CH1122 or CH1160)
FW3110	Natural Resource Policy (3)	Spring
FW3410	Conservation Science (3)	Fall
FW4111	Indigenous Natural Resource Management (3)	Spring
FW4120	Tree Physiology (3)	Spring
FW4300	Wildland Fire (3)	Spring / FW3020 & (FW3010 or FW3012)
FW4380	Landscape Ecology & Planning	Spring / MA2720
FW4811	Integrated Resource Assessment Data (2)	Fall / FW3190
AND		
FW4830	Integrated Natural Resource Assessment (2)	Spring / FW4811

NOTE:**Prerequisite courses:**

- The prerequisite course must be successfully completed PRIOR to taking the subsequent course. Concurrent Prerequisites ~ (C) ~ may be taken at the same time, although it is not necessary if the prerequisite course is completed first. Required Corequisite courses that MUST be taken together in the same semester. See your academic advisor for questions.

Essential Education Requirements:

- 24 total credits. Required courses are UN1015-Composition (3 credits), a Foundations in the Human World course (3 credits), a Communication Intensive course (3 credits), an Arts & Culture course (3 credits), an Intercultural Competency (3000+) course (3 credits), a SHAPE course (3 credits), an Essential Education Experience (3000+) course (3 credits), and 3 credits of Activities for Wellbeing and Success. Activities for Well-being and Success: Mainly physical education courses with some additions. Three credits are required for graduation. These credits will be included as earned hours and may be used to determine full-time enrollment status.