## AGROECOLOGY AND LANDSCAPE DESIGN B.S.

All students must meet the Degree and University Requirements.

All students must meet the Catamount Core Curriculum Requirements.

All students must meet the College Requirements.

Agroecology and Landscape Design (ALD) is a degree that provides a foundation in the natural sciences with an emphasis on the application of ecological principles to managed landscapes and the production of horticulture or agronomic crops. Disciplinary synthesis is attained through advanced courses in design, soils, plant pathology, entomology, and integrated farm management. Students are prepared to become practitioners through internship experiences and completing cross-disciplinary courses in ethics, policy, and economics.

## **CORE MAJOR REQUIREMENTS**

BIOL 1400 & BIOL 1450	Principles of Biology 1 and Principles of Biology 2	4
or BCOR 1400	Exploring Biology 1 and Exploring Biology 2	
& BCOR 1450	,	
CHEM 1100	Outline: General Chem w/lab	4
or CHEM 1400	General Chemistry 1 and General Chemistry 2	
& CHEM 1450	and contra chemistry 2	
MATH 1077	Exploring Modern Mathematics	3
or MATH 1234	Calculus I	
NR 2030	Ecology, Ecosystems & Environ	3
or BCOR 2100	Ecology and Evolution	
STAT 1110	Elements of Statistics	3
or STAT 1410	Basic Statistical Methods 1	
CDAE 1610	Principles of Comm Dev Econ	3
PBIO 2040	Plant Physiology	4
ALE 2380	Commercial Plant Propagation	4
ALE 2610	Fundamentals of Soil Science	4
ALE 2620	Soil Fertility & Conservation	3
ALE 2991	Internship	1
or ALE 3090	Diversified Farm Planning	
ALE 2810	Prof Dev: Ag, Landscape, & Env	1

## **Agroecology Concentration**

ALE 1210	Intro to Agroecology	3
ALE 2560	Permaculture	3
ALE 1100 & ALE 1150	Home & Garden Horticulture and Home & Garden Horticulture Lab	3-4
or ALE 1370	Living Landscapes	
ALE 2060	Entomology & Pest Mgmt	4
ALE 2120	Weed Ecology & Management	3
ALE 2170	Plant Pathology	4
ALE 3120	Advanced Agroecology	4
ALE/CDAE 3080	Agricultural Policy and Ethics	3
Choose one of the following:		3
ALE 3090	Diversified Farm Planning	
CDAE 2660	Intro to Comm Entrepreneurship	

Major electives - A minimum of 9 credits of approved course electives at 2000-level or above. Students are allowed to substitute a course or independent study up to 3 credits of the 9 required if given prior approval by the student's advisor. Suggested electives: ALE 2200 - Cold Climate Viticulture (summer); ALE 2240 - Sustainable Vegetable Crop Production; ALE 2270 - Greenhouse Operations & Mgmt; ALE 2370 - Landscape Design Fundamentals; ALE 2540 - Composting Ecology & Mgmt; ALE 3100 - Diversified Farm Operations (summer); ALE 3210 - Sustainable Orchard Management; ALE 3320 - Biological Control; ALE 3380 - Ecological Landscape Design; ALE 3680 - Soil Ecology; ALE 3690 - Soil/Water Pollution & Bioremediation

## **Landscape Design Concentration**

Choose two of the following:		
CDAE 1010	Drafting Design I	
CDAE 1170	Digital Illustration	
NR 2430	Intro to Geog Info Systems	
ALE 1100 & ALE 1150	Home & Garden Horticulture and Home & Garden Horticulture Lab	
Choose one of the following:		3
ALE 1210	Intro to Agroecology	
ALE 1370	Living Landscapes	
ALE 2230	Garden Flowers	
ALE 2250	Woody Landscape Plants	
ALE 2370	Landscape Design Fundamentals	
ALE 2371	Landscape Design Studio	
ALE 3380	Ecological Landscape Design	

1

Choose two of the following:		6-8
ALE 2060	Entomology & Pest Mgmt	
ALE 2120	Weed Ecology & Management	
ALE 2170	Plant Pathology	
ALE 2560	Permaculture	

Major electives - A minimum of 9 credits of approved course electives at 2000-level or above. Students are allowed to substitute a course or independent study up to 3 credits of the 9 required if given prior approval by the student's advisor. Suggested electives: ALE 2200 - Cold Climate Viticulture; ALE 2240 - Sustainable Vegetable Crop Production; ALE 2270 - Greenhouse Operations & Mgmt; ALE 2540 - Composting Ecology & Mgmt; ALE 3210 - Sustainable Orchard Management; ALE 3120 Advanced Agroecology; ALE 3080 Agriculture Policy and Ethics; ALE 3320 - Biological Control; ALE 3680 Soil Ecology; ALE 3690 - Soil/Water Pollution & Bioremediation; CDAE 2010 - Advanced Sketchup; CDAE 2660 - Intro to Community Entrepreneurship.