

SUSTAINABLE AGRICULTURE AND FOOD SYSTEMS MAJOR (B.A.)

<http://colsa.unh.edu/anfs/safs/sustainable-agriculture-and-food-systems-ba>

Description

The **Bachelor of Arts (B.A.) degree in Sustainable Agriculture and Food Systems** is designed for students interested in obtaining a well-rounded education in this field. As compared with the B.S. degree, the B.A. degree offers more flexibility to take courses from a variety of disciplines or to pursue a dual degree, second major or minor.

Requirements

The SAFS B.A. program structure includes FOUR major components: foundation courses, courses in a student-designed emphasis area, program elective courses, and a capstone.

Foundation courses include 36 credits, which satisfy 5 of the University Discovery requirements. You must earn a minimum grade of C- in these courses.

Student-Designed Emphasis courses include 20 credits that make up a cohesive emphasis or focus area. Courses may be selected from the *List of Approved Program Electives*, but do not need to be on that list. An appropriate group of courses transferred from a completed 2-year program such as TSAS could serve as an emphasis area. Each student will define their emphasis area in consultation with their advisor and submit it to the SAFS program committee for approval prior to the start of their 6th semester.

Program Elective courses include 20 credits, chosen from the *List of Approved Program Elective* courses.

A **Capstone** experience is a University requirement. Capstone experiences may include formal coursework, pre-approved honors theses or mentored research projects or other special activities that address appropriate and relevant aspects of the capstone experience. *This must take place during the senior year.*

Of the Student-Designed Emphasis and Program Elective courses, **at least 16 credits (not counting the capstone) must be earned at the 600-700 level.** Further, **at least 4 credits must qualify as Experiential.**

Foundation Courses ¹ 36

ANSC 421	Animal Agriculture Today
or AAS 431	Introduction to Animal Science
BIOL 528	Applied Biostatistics I
or EREC 525	Statistical Methods and Applications
CHEM 411	Introductory Chemistry for Life Sciences
or CHEM 403	General Chemistry I
EREC 411	Environmental and Resource Economics Perspectives
or ECON 402	Principles of Economics (Micro)

NR 501	Studio Soils	
NUTR 405	Food and Society	
	or NUTR 400 Nutrition in Health and Well Being	
	or NUTR 730 From Seed to Sea: Examining Sustainable Food Systems	
SAFS 405	Sustainable Agriculture and Food Production	
SAFS 421	Introductory Horticulture	
SAFS 502	Agroecology	
Student-Designed Emphasis Area ^{2,3}		20
Select 20 credits from the approved electives list.		
Program Electives ^{2,3}		20
Select 20 credits from the approved electives list.		
Senior Capstone ⁴		
Select one from the following:		
SAFS 733	Advanced Topics in Sustainable Agriculture	
SAFS 679 & SAFS 680	Food Production Field Experience I and Food Production Field Experience II	
SAFS 795	Investigations	
SAFS 799	Honors Senior Thesis	
ANSC 698	Cooperative for Real Education in Agricultural Management (CREAM)	
ECOG 701	EcoGastronomy Capstone (EcoGastronomy majors)	

¹ Students are required to earn 36 credits of foundation courses, which will provide them with fundamental knowledge in disciplines relevant to agricultural production and management. Most of these courses are offered by departments in the College of Life Sciences and Agriculture.

² Of the emphasis and program elective courses, at least 20 credits (not counting the capstone) must be earned at the 600 or 700 level. Four credits must qualify as experiential (indicated on the list of approved electives).

³ Students select a cohesive group of courses from the approved electives list; additional relevant courses may be considered. Students will define their emphasis area and submit it to the SAFS program advisory committee for approval prior to the start of their seventh semester or fourth year.

⁴ Capstone experiences may include formal coursework, pre-approved honors theses or mentored research projects, or other special student activities accepted by the SAFS program.

University Requirements

In addition to meeting the SAFS major requirements, students must satisfy all University requirements including those that pertain to the minimum number of credits, grade-point average, writing-intensive courses, the Discovery Program, and foreign language (only for B.A. students).

Approved Electives

Code	Title	Credits
Animal Courses		
AAS 402	Introduction to Livestock and Poultry Management	2
AAS 421	Large Animal Behavior and Handling Techniques	2
AAS 423	Dairy Selection	2
AAS 424	Animal Law and Regulations	3

AAS 425	Introduction to Dairy Herd Management	4	NR 761	Environmental Soil Chemistry	4
AAS 431	Introduction to Animal Science	4	NR 765	Community Ecology	4
AAS 432	Introduction to Forage and Grassland Management	3	NR 785	Systems Thinking for Sustainable Solutions	4
AAS 439	Fundamentals of Animal Health	2	NR 795	Investigations (Topic: Soil Fertility and the Environment, 4cr)	1-4
AAS 535	Animal Nutrition	3	SAFS 729	Agricultural Waste Management	4
AAS 540	Animal Breeding	3	Experiential Courses		
AAS 574	Dairy Cattle Disease Seminar	2	SAFS 733	Advanced Topics in Sustainable Agriculture	4
ANSC 510	Integration of Culture and Agriculture in Ireland: Past, Present, and Future	2 or 4	SAFS 795	Investigations	1-4
ANSC 602	Animal Rights and Societal Issues	4	SAFS 799	Honors Senior Thesis	1-4
ANSC 609	Principles of Animal Nutrition	4	ANSC 795	Investigations	1-4
ANSC 612	Genetics of Domestic Animals	4	NUTR 795	Investigations	1-4
ANSC 650	Dairy Industry Travel Course	1	Food/Nutrition Courses		
ANSC 698	Cooperative for Real Education in Agricultural Management (CREAM)	4	CAN 407	Hospitality Sanitation and Safety	1
ANSC 701	Physiology of Reproduction	4	CAN 422	Cuisine and Culture	4
ANSC 708	Ruminant Nutritional Physiology	3	CAN 528	Culinary Nutrition	2
ANSC 710	Dairy Nutrition	4	ECOG 401	Introduction to Ecogastronomy	4
ANSC 715	Physiology of Lactation	4	HMG 403	Introduction to Food Management	4
ANSC 724	Reproductive Management and Artificial Insemination	4	HMG 570	International Food and Culture	4
ANSC 727	Advanced Dairy Management I	4	BMS 503	General Microbiology	3
ANSC 728	Advanced Dairy Management II	4	NUTR 400	Nutrition in Health and Well Being	4
ZOOL 610	Principles of Aquaculture	4	NUTR 550	Food Science: Principle and Practice	4
ZOOL 710	Ichthyology	4	NUTR 720	Community Nutrition	4
ZOOL 772	Fisheries Biology	3	NUTR 730	From Seed to Sea: Examining Sustainable Food Systems	4
ZOOL 773	Physiology of Fish	4	Forest Courses		
Business/Technical Practices/Policy Courses			FORT 564	Arboriculture	3
ABM 404A & ABM 404B	Introduction to Business I and Introduction to Business II	4	FORT 576	Forest Products	4
ABM 407	Applied Marketing	4	FORT 577	Forest Harvesting Systems	4
ABM 506	Human Resource Management	4	FORT 579	Forest Fire Control and Use	2
AAS 546	Animal Business Applications	4	NR 425	Field Dendrology	4
EREC 601	Agribusiness Economics and Management	4	NR 506	Forest Entomology	4
EREC 680	Agricultural and Food Policy	4	NR 527	Forest Ecology	4
EREC 760	Ecological-Economic Modeling for Decision Making	4	NR 542	Forestland Measurement and Mapping	1
Environment Courses			NR 602	Natural Resources and Environmental Policy	4
BIOL 541	General Ecology	4	NR 643	Economics of Forestry	4
CHE 410	Energy and Environment	4	NR 729	Silviculture	4
CEP 415	Community Development Perspectives	4	NR 749	Forest Inventory and Modeling	4
GEOG 670	Climate and Society	4	NR 782	Forest Health in a Changing World	4
NR 435	Contemporary Conservation Issues and Environmental Awareness	4	NR 783	Forest Communities of New Hampshire	4
NR 504	Freshwater Resources	4	Plant Courses		
NR 621	Field Description of Soils	3	BIOL 408	Plants and Civilization	4
NR 650	Principles of Conservation Biology	4	BIOL 409	Introductory Botany	4
NR 701	Ecological Sustainability and Values	4	BIOL 510	Mushrooms, Molds, and Mildews: Introduction to the Fungal Kingdom	4
NR 706	Soil Ecology	4	BIOL 566	Systematic Botany	4
NR 735	Land Conservation Principles and Practices	4	BIOL 701	Plant Physiology	5
NR 760	Geographic Information Systems in Natural Resources	4	BIOL 720	Plant-Animal Interactions	4
			BIOL 752	Mycology	4
			GEN 774	Techniques in Plant Genetic Engineering and Biotechnology	4
			HT 404	Plant Propagation	4
			HT 554	Sustainable Irrigation and Rain Harvesting	3

HT 460	Sustainable Plant Management	4
SAFS 410	A Taste of the Tropics	4
SAFS 415	Introduction to Brewing Art and Science	4
SAFS 510	Agriculture and Development in the Neotropics	4
SAFS 601	Fruit Crop Production	4
SAFS 632	Urban Agriculture	4
SAFS 651	Plant Pathology	4
SAFS 679	Food Production Field Experience I	4
SAFS 680	Food Production Field Experience II	4
SAFS 689	Greenhouse Management and Operation	4
SAFS 760	Insect Pest Management	4