

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

<https://colsa.unh.edu/agriculture-nutrition-food-systems/program/ba/sustainable-agriculture-food-systems-major>

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.**

| Code | Title | Credits |
|---------------------------|---|-----------|
| Foundation Courses | | 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)

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| 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 | | 20 |
| Select 20 credits from the approved electives list. | | |
| Program Electives | | 20 |
| Select 20 credits from the approved electives list. | | |
| Senior Capstone | | |
| 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) | |

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 |
| AAS 431 | Introduction to Animal Science | 4 |
| AAS 432 | Introduction to Forage and Grassland Management | 3 |
| AAS 439 | Fundamentals of Animal Health | 2 |
| AAS 535 | Animal Nutrition | 3 |
| AAS 540 | Animal Breeding | 3 |
| AAS 574 | Dairy Cattle Disease Seminar | 2 |
| ANSC 510 | Integration of Culture and Agriculture in Ireland: Past, Present, and Future | 2 or 4 |
| ANSC 602 | Animal Rights and Societal Issues | 4 |
| ANSC 609 | Principles of Animal Nutrition | 4 |
| ANSC 612 | Genetics of Domestic Animals | 4 |

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| ANSC 625 | Diseases of Small Ruminants, Swine, Poultry, and Camelids | 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 |
| ANSC 750 | Collaborative Farm Design and Development | 4 | NUTR 550 | Food Science: Principle and Practice | 4 |
| ZOOL 610 | Principles of Aquaculture | 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 | Introduction to Business I | 4 | FORT 576 | Forest Products | 4 |
| & ABM 404B | and Introduction to Business II | | FORT 577 | Forest Harvesting Systems | 4 |
| ABM 407 | Applied Marketing | 4 | FORT 579 | Forest Fire Control and Use | 2 |
| ABM 506 | Human Resource Management | 4 | NR 425 | Field Dendrology | 4 |
| AAS 546 | Animal Business Applications | 4 | NR 506 | Forest Entomology | 4 |
| EREC 601 | Agribusiness Economics and Management | 4 | NR 527 | Forest Ecology | 4 |
| EREC 680 | Agricultural and Food Policy | 4 | NR #542 | Forestland Measurement and Mapping | 1 |
| EREC 760 | Ecological-Economic Modeling for Decision Making | 4 | NR 602 | Natural Resources and Environmental Policy | 4 |
| Environment Courses | | | NR 643 | Economics of Forestry | 4 |
| BIOL 541 | General Ecology | 4 | NR 729 | Silviculture | 4 |
| CHE 410 | Energy and Environment | 4 | NR 749 | Forest Inventory and Modeling | 4 |
| CEP 415 | Community Development Perspectives | 4 | NR 782 | Forest Health in a Changing World | 4 |
| GEOG 670 | Climate and Society | 4 | NR #783 | Forest Communities of New Hampshire | 4 |
| NR 435 | Contemporary Conservation Issues and Environmental Awareness | 4 | Plant Courses | | |
| NR 504 | Freshwater Resources | 4 | BIOL 408 | Plants and Civilization | 4 |
| NR #621 | Field Description of Soils | 3 | BIOL 409 | Introductory Botany | 4 |
| NR 650 | Principles of Conservation Biology | 4 | BIOL 510 | Mushrooms, Molds, and Mildews: Introduction to the Fungal Kingdom | 4 |
| NR 701 | Ecological Sustainability and Values | 4 | BIOL 566 | Systematic Botany | 4 |
| NR 706 | Soil Ecology | 4 | BIOL 701 | Plant Physiology | 5 |
| NR #735 | Land Conservation Principles and Practices | 4 | BIOL 720 | Plant-Animal Interactions | 4 |
| NR 760 | Geographic Information Systems in Natural Resources | 4 | BIOL 752 | Mycology | 4 |
| NR 761 | Environmental Soil Chemistry | 4 | GEN 774 | Techniques in Plant Genetic Engineering and Biotechnology | 4 |
| NR 765 | Community Ecology | 4 | HT 404 | Plant Propagation | 4 |
| NR 785 | Systems Thinking for Sustainable Solutions | 4 | HT 554 | Sustainable Irrigation and Rain Harvesting | 3 |
| NR 795 | Investigations (Topic: Soil Fertility and the Environment, 4cr) | 1-4 | HT 460 | Sustainable Plant Management | 4 |
| SAFS 729 | Agricultural Waste Management | 4 | SAFS 410 | A Taste of the Tropics | 4 |
| Experiential Courses | | | SAFS 415 | Introduction to Brewing Art and Science | 4 |
| SAFS 733 | Advanced Topics in Sustainable Agriculture | 4 | SAFS 510 | Agriculture and Development in the Neotropics | 4 |
| SAFS 795 | Investigations | 1-4 | SAFS 601 | Fruit Crop Production | 4 |
| SAFS 799 | Honors Senior Thesis | 1-4 | SAFS 632 | Urban Agriculture | 4 |
| ANSC 795 | Investigations | 1-4 | SAFS 651 | Plant Pathology | 4 |
| | | | SAFS 679 | Food Production Field Experience I | 4 |
| | | | SAFS 680 | Food Production Field Experience II | 4 |

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| SAFS 689 | Greenhouse Management and Operation | 4 |
| SAFS 760 | Insect Pest Management | 4 |