

SUSTAINABLE AGRICULTURE (SAGR)

SAGR 101, FALL CROP PRODUCTION 3 (5)

This skills-based course includes a study of fall sustainable crop production practices, including but not limited to vegetables, culinary and medicinal herbs, and cut flowers. Topics can include harvest methods, soil testing and amendment, marketing and economic viability, and various record keeping procedures, such as those needed for organic certification. Students will gain knowledge of crop production appropriate to the fall season in the Great Lakes bioregion. Course incorporates off-campus outdoor living classrooms and an opportunity for service learning.

General Education: GEO1, GEO2, GEO4, GEO5, GEO6, GEO8

Typically Offered: Fall Semester

SAGR 102, SPRING CROP PRODUCTION 3 (5)

This skills-based course includes a study of spring sustainable crop production practices, including but not limited to vegetables, culinary and medicinal herbs, and cut flowers. Topics can include variety selection, production methods, soil testing and amendment, and various record keeping procedures, such as those needed for organic certification. Students will gain knowledge of crop production appropriate to the spring season in the Great Lakes bioregion. Course incorporates off-campus outdoor living classrooms and an opportunity for service learning.

General Education: GEO1, GEO2, GEO3, GEO4, GEO6, GEO8

Typically Offered: Spring Semester

SAGR 103, SUMMER CROP PRODUCTION 3 (5)

This skills-based course includes a study of summer sustainable crop production practices, including but not limited to vegetables, culinary and medicinal herbs, and cut flowers. Topics can include irrigation systems, production methods, soil testing and amendment, weed barriers and pest control, and various record keeping procedures, such as those needed for organic certification. Students will gain knowledge of crop production appropriate to the summer season in the Great Lakes bioregion. Course incorporates off-campus outdoor living classrooms and an opportunity for service learning.

General Education: GEO1, GEO2, GEO4, GEO5, GEO6, GEO8

Typically Offered: Summer Semester

SAGR 105, INTRODUCTION TO LIVING LANDSCAPES 3 (3)

This course is an introduction to landscape design, including edible landscapes, pollinator gardens, and living walls. Course teaches plant selection and care required to maintain landscapes in both exterior and interior environments. Soil types, watering needs, and pest identification are discussed as well as use of the color wheel and textures to create an aesthetically pleasing and functional designs. Connections showing how interior and exterior landscaping relates to human health, the green industry, and sustainable agriculture are emphasized. This course also contains an opportunity for service learning. A special fee will be assessed. This course provides preparation for a Pesticide Application Certification. An additional fee will be assessed if a student is interested in earning the certification. (CTAG)

General Education: GEO1, GEO2, GEO5, GEO6, GEO7, GEO8

Typically Offered: Fall and Spring Semesters

SAGR 106, SOIL MANAGEMENT AND CONSERVATION 3 (4)

This skills-based course includes a study of soil fertility and management for sustainable crop production. Topics can include soil testing, interpretation of soil test results, composting and soil microbes, cover crops, and other soil conservation/production practices. Students will gain knowledge of soils in the Great Lakes bioregion. Course is a service learning course. (CTAG)

General Education: GEO1, GEO2, GEO6, GEO7, GEO8

Typically Offered: Spring Semester

SAGR 107G, WORLDVIEWS TO SUPPORT SUSTAINABLE AGRICULTURE 1 (1)

This course provides an ethical framework for sustainable agriculture by outlining current environmental and social justice challenges in a weekend-long symposium. It will review topics such as consumption, peak oil, militarization, environmental justice, social entrepreneurship, public policy and outline various social movements for a sustainable future to benefit humans and the rest of the natural world. Students will gain knowledge of worldviews and ethical stances appropriate to the Great Lakes bioregion. Course incorporates 1.5 day (15 hour) weekend symposium with a virtual component.

General Education: GEO2, GEO4, GEO5, GEO6, GEO8

Typically Offered: Fall Semester

SAGR 109, WILD EDIBLES 1 (1)

Course is hands-on and field-based. Students explore seasonal wild foods growing in Lorain County and must provide their own transportation. Students learn how to forage in a variety of habitats, learn to identify edible species, how to distinguish from look-alikes, and how to incorporate wild edibles into his or her diet. Course content will also relate to sustainable agriculture in the following ways: studies of comparative health among hunter-gatherer and farming cultures; ethics of foraging and overharvesting; politics of foraging; wild ancestors of modern agricultural crops; history of plant domestication; how to incorporate "wild" foods into crop production systems; how to re-vision what agriculture might look like using techniques such as food forest; and a critique of problematic binaries: weed vs. Crop; native vs. invasive. This course may be repeated up to three (3) times for credit if the course is taken in different seasons (spring, summer, or fall), and can satisfy up to (3) credits for academic program requirement as an approved course substitution.

General Education: GEO2, GEO4, GEO5, GEO6, GEO8

Typically Offered: Summer, Fall and Spring Semesters

SAGR 112, BUSINESS PRINCIPLES OF SUSTAINABLE AGRICULTURE 3 (3)

Course surveys a wide variety of business aspects in the emerging field of sustainable agriculture. Increasing consumer demand for locally-grown produce supports the economic development of ecologically sound, socially responsible businesses and cooperatives. An overview of basic business principles is tailored to those interested in developing new businesses or currently operating in specialty crop farming, non-profit, and/or other niche markets in the regional food system. Students define their roles within a business structure and engage in the creation of a mission statement and business plan designed for real-world application. Topics can include but are not limited to: marketing, risk management tools, business contracts, human resource management, business structures, cooperative principles and skills, labor management relations, and recordkeeping. (CTAG)

General Education: GEO1, GEO2, GEO4, GEO6, GEO8

Typically Offered: Fall Semester

SAGR 113, PLANT PROPAGATION 2 (3)

This skills-based course will cover a variety of techniques for successfully producing plants through seed sowing and vegetative propagation including cutting, plant division, and grafting. Concepts such as seed structure, dormancy, stratification, scarification, and plant meristematic tissue will be covered as they relate to the successful propagation of plants. Course also includes an introduction to plant taxonomy and genetic diversity. Course includes an on-campus a Service Learning component. (CTAG)

General Education: GE01, GE02, GE04, GE06, GE08

Typically Offered: Spring Semester

SAGR 114, INTRODUCTION TO SUSTAINABLE AGRICULTURE 3 (5)

Course surveys a diverse set of principles and practices that support the sustainable production of food. A wide variety of local farms, community partners and related businesses provide examples of economic, environmental, and social sustainability. Lecture highlights current agricultural research, historical and cultural approaches to farming, and explores diverse perspectives of what is sustainable. Laboratory experiences include tours, demonstrations, and hands-on activities at a variety of local farms and community gardens. Students must provide their own transportation. Students explore career options through shared experiences with local farmers and guest speakers. Course promotes the holistic development of academic, social, personal and career skills and may contain a Service Learning component. Laboratory required.

General Education: GE01, GE02, GE04, GE05, GE06, GE08

Typically Offered: Fall Semester

SAGR 115G, FOOD SYSTEMS, SOCIETY AND GLOBAL HEALTH 3 (3)

Course is an introduction to food systems, including but not limited to food production, processing, and consumption. Selected readings and videos provide a rich and diverse background of cultural and natural histories and present fundamental perspectives in ecology, agriculture, food science, and food justice. Students investigate the connections, impacts, and relationships that food has on the environment, public policy, society, the economy, human health and food security. A systems approach is applied at the local, national and global scales. This course may include a Service Learning component.

General Education: GE01, GE02, GE04, GE05, GE06, GE08

Typically Offered: Spring Semester

SAGR 116, BASF CERTIFICATION PREPARATION COURSE 2 (2)

This course is designed to prepare students to pass the exam needed to earn the Badische Anilin und Soda Fabrik (BASF) Plant Science Certification. It is recommended upon completion of the One-Year Technical Certificate associated with the credential. The course reviews topics covered in sustainable agriculture and biology courses embedded within the certificate with a focus on topics not fully addressed by existing courses, such as crop production in the southern and western states, hydroponics, pesticides and herbicides, inorganic fertilizers, and water measurement.

General Education: GE02, GE06, GE08

Typically Offered: Spring Semester

SAGR 117, PERMACULTURE DESIGN: PRINCIPLES AND APPLICATIONS 5 (6)

This course is an introduction to permaculture, an organizing framework for the application of systems thinking and ecological design to implement a vision of consciously designed landscapes, and related social systems, yielding an abundance of food, fiber and energy for provision of local needs. Building on a core set of ethical precepts and design principles, students will gain practical knowledge in designing productive and resilient landscapes that mimic the patterns and relationships found in nature. The course explores the regenerative implications of permaculture at the site-specific, local, bioregional and global levels of scale, as well as applications in the areas of disaster preparedness, community resilience, biodiversity, and food security. Course includes a substantial experiential education component with at least half of the instructional time spent developing a real-world design project. Upon completion, the student will earn a professional Permaculture Design Certification.

General Education: GE01, GE02, GE03, GE04, GE05, GE06, GE08

Course Entry Requirement(s): None

Typically Offered: Summer Semester

SAGR 118, INTRODUCTION TO SUSTAINABLE ANIMAL FARMING 3 (4)

Course provides an introduction to sustainable practices in the production of livestock (cattle, swine, sheep and goats, poultry and other species). Fundamental concepts of management are explored including a survey of animal identification, basic anatomy and physiology, housing, equipment and handling, nutrition, behavior, health, management, and current issues related to animal production. Blended course format. Laboratory required. Lab includes hands-on experiences on a variety of local farms. Students must provide their own transportation.

General Education: GE02, GE04, GE05, GE06

Typically Offered: Summer Semester

SAGR 170, SERVICE LEARNING I SUSTAINABLE AGRICULTURE 1-3 (7.5)

This course provides a structured community service experience in sustainable agriculture with an approved community partner and faculty advisor. Students will evaluate the importance of their personal contribution in meeting identified community needs while pursuing academic study and career exploration. Students will gain real world experience in an interactive, dynamic environment.

General Education: GE01, GE02, GE03, GE04, GE06, GE08

Course Entry Requirement(s): Prerequisite: A student must have completed a minimum of six semester hours and have a minimum of 2.5 GPA or division approval.

Typically Offered: Offer as required

SAGR 287, WORK BASED LEARNING I - SAGR 1-3 (1)

This course provides supervised work experience building on experience in Work-Based Learning with approved employer(s) in an area related to the student's program. Emphasis is placed on integrating classroom learning with work experience. Students will be able to evaluate career selection, demonstrate employability skills, and satisfactorily perform work-related competencies. Activities are coordinated and evaluated by college personnel.

General Education: GE01, GE02, GE06, GE08

Course Entry Requirement(s): Prerequisite: Minimum 2.0 GPA overall and division approval

Typically Offered: Offer as required

SAGR 288, WORK BASED LEARNING II - SAGR 1-3 (1)

Building on experiences from Work Based Learning I, this course provides supervised, paid work experience with approved employer(s) in an area related to the student's program. Emphasis is placed on integrating prior or concurrent classroom learning with work experience through career readiness competencies. Students will be able to evaluate career selection and satisfactorily demonstrate work-related competencies.

General Education: GE01, GE02, GE06, GE08

Course Entry Requirement(s): Prerequisite: SAGR 287

Typically Offered: Offer as required

SAGR 289, WORK BASED LEARNING III - SAGR 1-3 (1)

Building on experiences from Work Based Learning II, this course provides supervised, paid work experience with approved employer(s) in an area related to the student's program. Emphasis is placed on integrating prior or concurrent classroom learning with work experience through career readiness competencies. Students will be able to evaluate career selection and satisfactorily demonstrate work-related competencies.

General Education: GE01, GE02, GE06, GE08

Course Entry Requirement(s): Prerequisite: SAGR 288

Typically Offered: Offer as required

SAGR 299, INDIVIDUALIZED STUDIES IN SAGR 1-3 (1)

An in-depth study of areas in sustainable agriculture presented by discussion and/or individual research and reading. Topics will vary. Repeatable up to six (6) times for a total of six (6) credit hours.

Course Entry Requirement(s): Prerequisite: Second year standing and division approval.

Typically Offered: Offer as required