

# SFBS - Sustainable Food & Bioenergy

## **SFBS 146 Introduction to Sustainable Food and Bioenergy Systems: 3 Credits (3 Lec)**

(Sp) Interdisciplinary in nature, this course will provide insight into food and energy systems through exploration of agroecology, natural resource management, crop and livestock production, biodiversity, land use issues, impacts of climate change, labor issues, agriculture economics and trade, nutrition and public health, food security, innovation, entrepreneurship and policy. Interactive lectures, readings, activities, projects and field trips will provide exposure to this wide range of interdisciplinary topics.

## **SFBS 296 Practicum: Towne's Harvest: 3 Credits (1 Lec, 2 Lab)**

PREREQUISITE: SFBS 146 or permission of instructor. (Su) Emphasizes hands-on field experience with small-scale market gardening, distribution through community-supported agriculture, and market sales at local farmers' markets. Students will complete one independent project, service-learning at local farms and complete weekly writing assignments

## **SFBS 298 Internship: 2-12 Credits (2-12 Other)**

PREREQUISITE: Consent of instructor. (F, Sp, Su) An individualized assignment with a professional agency to provide a guided field experience Repeatable up to 12 credits.

## **SFBS 327 Ethnobotany: 3 Credits (3 Lab)**

PREREQUISITE: SFBS 146 or SFBS 296 or SFBS 298, or consent of instructor. (F) Students will learn natural and social science tools to measure innovation in food systems. Training will be provided on experimental design as well as data collection, analysis and dissemination. Research methods will draw from agro-ecology, botany, cultural anthropology and nutrition

## **SFBS 346 Sustainable Food and Bioenergy Systems Summer Field Course: 1 Credits (1 Other)**

PREREQUISITE: SFBS 146 or consent of instructor. (Su) An overnight field trip to 3-4 regional farms, businesses, or agricultural research centers, a pre-trip meeting and a post-trip reflection assignment. Students will navigate rural areas, interact with local business people and farmers, and experience challenges to pre-existing assumptions about the nature of food production Repeatable up to 3 credits.

## **SFBS 429 Small Business and Entrepreneurship in Food and Health: 3 Credits (3 Lec)**

PREREQUISITE: ECNS 101IS, or HDFS 138 or HDFS 239 and senior standing or permission of instructor. (F) Introduces basic business, marketing, and management concepts for owning and operating a successful small business. To demonstrate their understanding of core concepts, working in teams, students will develop a value-added agriculture product concept, and prepare a business plan, pitch deck, and five-year cash flow projection. There will be an emphasis on entrepreneurship, sustainability, corporate responsibility in food system enterprises, and food system economics

## **SFBS 445R Culinary Marketing: Farm/Table: 3 Credits (1 Lec, 2 Lab)**

PREREQUISITE: NUTR 221CS, NUTR 226, NUTR 227, and NUTR 322 or permission of instructor. (Su) Emphasizes hands-on food experience, including market garden tending and harvesting, distribution by community supported agriculture, food marketing and retail at farmers' markets, culinary practice with seasonal garden produce and food preservation, educational outreach and culinary demonstrations, and independent research projects

## **SFBS 451R Sustainable Food Systems: 3 Credits (3 Lec)**

PREREQUISITE: NUTR 221CS and senior standing or consent of instructor. (Sp) This course examines the connections among the food industry, agriculture, and the environment and considers the sustainability of food choices. Students gain a systems perspective on current nutrition problems such as hunger, obesity, and disordered eating. Students conduct independent research

## **SFBS 466 Food System Resilience: 3 Credits (3 Lec)**

PREREQUISITE: SFBS 146, SFBS 296 or SFBS 298, NUTR 221CS or consent of instructor. (Sp) This course uses an examination of case studies to build a theoretical foundation of resilience thinking, including adaptive capacity, management, complexity, thresholds, regime shifts, transformation, and vulnerability. Application of resilience thinking to production and consumption include an examination of adaptive management and global environmental change as well as food security and dietary transitions. The socio-ecological determinants of resilience will be identified to design adaptable food systems that support environmental and human health in the context of global change

## **SFBS 490R Undergraduate Research: 1-6 Credits (1-6 Other)**

PREREQUISITE: Junior standing and consent of instructor. (F, Sp, Su) Directed undergraduate research/creative activity which may culminate in a research paper, journal article, or undergraduate thesis. Course will address responsible conduct of research. May be repeated

## **SFBS 491 Special Topics: 1-4 Credits (1-4 Other)**

PREREQUISITE: Course prerequisites as determined for each offering. Courses not required in any curriculum for which there is a particular one-time need, or given on a trial basis to determine acceptability and demand before requesting a regular course number. - Repeatable up to 12 credits.

## **SFBS 492 Independent Study: 1-3 Credits (1-3 Other)**

PREREQUISITE: Junior standing, consent of instructor and approval of department head. (F, Sp, Su) Directed research and study on an individual basis

## **SFBS 498 Internship: 1-12 Credits (1-12 Other)**

PREREQUISITE: Consent of instructor and junior standing. (F, Sp, Su) An individualized assignment with a professional agency to provide a guided field experience Repeatable up to 12 credits.

## **SFBS 499 Senior Thesis/Capstone: 3 Credits (3 Lec)**

PREREQUISITE: SFBS 146, SFBS 296 or SFBS 298, SFBS 498 and senior standing. (Su) Capstone experience for SFBS majors. Emphasizes systems thinking about food and bioenergy from production to consumption. Integrates SFBS field experience into development of outreach materials, interdisciplinary team project work, and honing of professional skills including oral and written communication; leadership

## **SFBS 541 Culinary Marketing: Farm to Table: 3 Credits (3 Lec)**

PREREQUISITE: Graduate Standing. (Su) Emphasizes hands-on food experience, including market garden tending and harvesting, distribution by community supported agriculture, food marketing and retail at farmers' markets, culinary practice with seasonal garden produce, food preservation and product development, teaching and culinary demonstrations, and marketing plan development

## **SFBS 545 Exploration of Food Biotechnology: 2 Credits (2 Lec)**

PREREQUISITE: Graduate level. (F) This course will delve into the history, techniques, applications, and ethical concerns associated with the rapidly growing areas of biotechnology in food production, food processing and agriculture. All course participants will receive food biotechnology curriculum materials for incorporation into the high school biology classroom. Course is currently not being offered

**SFBS 551 Global Food Perspectives: 3 Credits (3 Lec)**

(F) Explores the making of the American diet by examining the impact of global historical events, cultural trends, economic pressures and political activities. Students think critically about the relationship between health and the food supply, proposing solutions to common food problems.

**SFBS 552 State of the Food Environment: 3 Credits (3 Lec)**

PREREQUISITE: Graduate standing. (Sp) To better understand the state of the United States food environment, this course examines food system policies, how they are measured, and what happens when they are put into practice. Students will explore critical issues in the food environment that impact national health, including policies related to food and nutrition assistance programs, food prices, community characteristics, food service, food safety, land use planning, and food access

**SFBS 575 Prof Paper & Project: 1-6 Credits (1-6 Other)**

PREREQUISITE: Graduate standing. (F, Sp, Su) A research or professional paper or project dealing with a topic in the field. The topic must have been mutually agreed upon by the student and his or her major advisor and graduate committee  
Repeatable up to 6 credits.

**SFBS 590 Master's Thesis: 1-10 Credits (1-10 Other)**

PREREQUISITE: Master's standing. (F, Sp, Su) Directed graduate research/creative activity with advisor and graduate committee  
Repeatable up to 99 credits.

**SFBS 598 Internship: 2-12 Credits (2-12 Other)**

PREREQUISITE: Graduate standing and consent of instructor. (F, Sp, Su)  
An individualized assignment arranged with an agency, business or other organization to provide guided experience in the field  
Repeatable up to 12 credits.