

Food Systems Courses Offered at UBC				
Course	Faculty	Credits	Description	Pre-requisites
1. ANTH 210 – Eating Culture	Arts	3	An anthropological exploration of how the collection, cultivation and consumption of food shapes human society and culture.	
2. APBI 200 – Introduction to Soil Science	LFS	3	Soil as the base of the Earth's ecosystem pyramid. Physical, chemical and biological properties of soils; soil formation, classification, use and conservation.	
3. APBI 260 – Agroecology I	LFS	6	Introduction to the biophysical and socioeconomic factors affecting systems management and production in selected agroecosystems.	
4. APBI 265 – Sustainable Agriculture and Food Systems	LFS	3	Principles and practices necessary to understand practical concerns of sustainable food systems.	
5. APBI 314 – Animals and Society	LFS	3	Contemporary use of animals for food production, companionship, recreation and science; social and ethical issues concerning human impacts on animals; animals in human culture; protection of animals by society and the law.	3rd yr standing
6. APBI 315 – Animal Welfare and the Ethics of Animal Use	LFS	3	Scientific assessment of animal well-being, ethical concepts applied to animal use, and animal welfare issues arising in agriculture, biomedical research and other areas.	3rd yr standing
7. APBI 322 – Horticultural Techniques	LFS	3	An introduction to horticultural practice in an experiential learning format. Plant identification, seeding, propagation, pruning, cultivation media, pesticide application and safety are examined in the context of integrated crop management.	
8. APBI 324 – Introduction to Seed Plant Taxonomy	LFS	3	Introduction to seed plant taxonomy emphasizing descriptive morphology and identification.	BIOL 121
9. APBI 360 – Agroecology II	LFS	4	Animals and Plants as Components of Agricultural Ecosystems. A systems approach is used to investigate the functions and interactions of plants and animals in agricultural systems.	APBI 260 or APBI 265
10. APBI 361 – Key Indicators of Agroecosystem Sustainability	LFS	3	A detailed exploration of biophysical, economic, and social ecosystem sustainability indicators for primary production subsystems.	
11. APBI 402 – Sustainable Soil Management	LFS	3	Application of fundamental, unifying, soil science principles in sustainable ecosystem management.	APBI 200
12. APBI 413 – Stress and Coping in Animals	LFS	3	Understanding, assessing, and managing stress in farm, companion, captive wildlife, and research animals: sources of stress; behavioural, emotional, cognitive, and physiological responses; effects on growth, reproduction, health.	3rd yr standing
13. APBI 414 – Animals and Global Issues	LFS	3	Research seminar integrating diverse information to address global animal issues	APBI 314 OR APBI 315

			including: animal-source foods and human health, environmental impact of livestock production, trade in exotic animals.	
14. APBI 417 – Production and Postharvest Physiology of Vegetable Crops	LFS	4	Morphology, growth and development, production, composition, quality, and postharvest physiology of vegetable crops.	
15. APBI 428 – Integrated Pest Management	LFS	3	Development and implementation of multi-disciplinary pest management programs in agricultural crops.	BIOL 121
16. APBI 442 – Grapevine and Berry Crop Biology	LFS	3	Grapevine genetics, morphology, and physiology and major biological features of other important berry crops for British Columbia such as blueberry, cranberry, and raspberry.	BIOL 112, BIOL 121, ONE OF APBI 210 OR BIOL 210, BIOL 234
17. APBI 444 – Agroforestry	LFS	3	An introduction to the application of knowledge and principles of agroecology and forest ecology to global agroforestry systems. The course includes a one-weekend field trip that requires a supplemental fee.	
18. APBI 460 – Advanced Agroecology	LFS	3	The relationship between biological diversity and sustainability for the management of agroecosystems; emphasis on ecological interactions between natural ecosystems and agroecosystems, including connections between agroecology and conservation biology.	APBI 360
19. APBI 465 Capstone in Sustainable Agriculture and Food Systems	LFS		Integrates classroom and applied learning at the UBC Farm with design project.	
20. APBI 490 Agricultural Ethics and Public Policy	LFS	3	As farming practices have changed to keep pace with increased demand of a growing population, many of the practices of modern farming have become the subjects of intense public debate. This course introduces students to debates about the direction of agriculture at the policy level and provide them with the tools needed to effectively engage in these ongoing debates.	3rd yr standing
21. APBI 495/CONS 495 – Principles of Wildlife Management in Forests and Agricultural Environments	LFS & Forestry	3	Impacts of wildlife on crop productivity in temperate and tropical environments, the resiliency of wildlife populations to conventional control methodology, adoption of innovative methods to reduce crop damage, and the impact of introduced species on native fauna.	
22. BIOL 343 – Plants and Peoples	Science		The interactions of plants and human societies: the role of people in the origin, evolution and dispersal of food, drug and economic plants, and the influences of plants on human societies. Suitable for upper-level Arts students.	3RD OR 4TH YR STANDING
23. COMM 306 – Urban Land Economics	Comm & Bus Admin	3	Examines economic factors affecting the urban land market, with an emphasis on determinants of urban land values, the housing market, urban transportation, and land use policies.	COMM 295 OR ECON 201 OR ECON 301

24. EDCP 329 – Agriculture in the Curriculum	Educational	3	Agricultural awareness, understanding the food system, and integration of food and agricultural literacy across the curriculum.	
25. ENVR 430 – Ecological Dimensions of Sustainability	Science	3	Current issues. Application to agricultural, energy, and resource systems in terrestrial and aquatic contexts. Analysis of complex problems; incorporation of science into novel interdisciplinary solutions.	ENVR 300, BIOL 230 OR 4TH YR STANDING (with ecology background)
26. EOSC 340 – Global Climate Change	Science	3	Mechanisms and processes of past and future global environmental and climate change.	A) SCIE 001 OR B) ONE OF CHEM 11/121/154 AND ONE OF MATH 101/103/121 AND ONE OF PHYS 101/107/117/153/157
27. FNH 200 - Exploring Our Food	LFS	3	Chemical and physical properties of foods; issues pertaining to safety, nutritive value and consumer acceptability; government regulations pertaining to food safety, quality and additives; preservation techniques and transformation of agricultural commodities to food products; foods of the future.	2ND YR STANDING
28. FNH 250 - Nutrition Concepts and Controversies	LFS	3	Fundamental concepts and principles of human nutrition applied to current nutrition issues.	ONE OF BIOL 111/112/153/155 OR KIN 190 AND KIN 191
29. FNH 300 - Principles of Food Engineering	LFS	3	Units and dimensions, mass balance, energy balance, steady state and transient heat flow, fluid handling and measurement.	PHYS 101 OR PHYS 107
30. FNH 301 - Food Chemistry 1	LFS	3	Constituents of food and related chemical physical properties including water, carbohydrates, proteins, lipids, minerals, and vitamins.	ONE OF CHEM 201/205 AND ONE OF CHEM 203/233
31. FNH 302 - Food Analysis	LFS	3	Principles of and procedures for analysis of the chemical and physical properties of food; proximate analysis; introduction to instrumental analysis; reporting and analysis of data.	ONE OF CHEM 201/205 AND ONE OF CHEM 203/233
32. FNH 303 - Food Product Development	LFS	3	Introduction to and application of concepts involved in food product formulation and development.	ONE OF LFS 252, BIOL 300, EPSE 482, FRST 231, STAT 200
33. FNH 309 - Food Process Science	LFS	3	Preservation of tissue and fluid food systems by selected physical and chemical treatments with emphasis on product-process interactions.	
34. FNH 313 - Microorganisms in Food Systems	LFS	3	Microorganisms of importance in safety, spoilage and preservation of foods; factors affecting growth, survival and inactivation of microorganisms in fermented food systems; food processing plant cleaning and sanitation.	BIOL 112
35. FNH 325 - Food Science Laboratory I	LFS	3	Integrated laboratory introducing techniques used in food processing and analysis.	FNH 300, FNH 301, FNH 302
36. FNH 326 - Food Science Laboratory II	LFS	3	Integrated laboratory encompassing the processing and analysis of foods. Enrolment restricted to Food Science students.	FNH 325

37. FNH 330 - Introduction to Wine Science I	LFS	3	Principles of viticulture, enology, and wine microbiology and chemistry; marketing, regulation and classification of wines from selected regions of the world; social, economic and health aspects of wine consumption; wine appreciation.	2ND YR STANDING
38. FNH 335 - Introduction to Wine Science II	LFS	3	Review of diverse styles of wine with consideration of classic wine-producing areas. Concepts in wine microbiology/chemistry; overview of steps in grape processing for diverse wine styles. Comparison of regulations for Canadian VQA systems with international systems. Wine sensory analysis.	FNH 330
39. FNH 340 - Food Theory	LFS	3	Principles of food preparation based on the physical and chemical properties of food.	FNH 200 AND ONE OF CHEM 111/113 OR CHEM 121/123
40. FNH 341 - Food Theory Applications	LFS	3	Experimental and practical application of scientific principles and theories to problems of food preparation.	FNH 340
41. FNH 342 - Critical Perspectives on Consumer Food Practices	LFS	3	Personal, collective, and policy factors affecting food choices, including perceptions of healthy eating, gender, identity, family structures, and economic, sociocultural, and political forces.	3RD YR STANDING
42. FNH 350 - Fundamentals of Nutrition	LFS	3	Fundamentals of energy and macronutrient metabolism.	FNH 250 AND ONE OF BIOL 201, BIOC 202)
43. FNH 351 - Vitamins, Minerals, and Health	LFS	3	Vitamin and mineral nutrition and their role in maintaining and promoting health.	FNH 250 AND ONE OF BIOL 201, BIOC 202)
44. FNH 355 - International Nutrition	LFS	3	Conceptualization and scientific analyses of global problems in food and nutrition; complexities of food habits and malnutrition in various cultures around the world.	
45. FNH 370 - Nutrition Assessment	LFS	3	The use of dietary, anthropometric, biochemical, and related information for the assessment of nutritional status of individuals and populations.	FNH 250
46. FNH 371 - Human Nutrition Over The Life Span	LFS	3	Nutritional requirements and dietary patterns of healthy individuals throughout the life span.	FNH 250
47. FNH 380 - Professional Dietetic Practice I	LFS	1	Introduction to the profession of dietetics in Canada.	
48. FNH 402 - Functional Foods and Nutraceuticals	LFS	3	Functional food and nutraceutical concepts related to ingredient safety and quality; examples of nutrient-disease relationships, requirements for standards of efficacy for health claims; market determinants of functional food and nutraceutical industries.	3RD YR STANDING
49. FNH 403 - Food Laws, Regulations and Quality Assurance	LFS	3	Canadian and international laws governing food composition, grading, quality and safety; hazard analysis critical control points; statistical quality assurance.	LFS 352 OR STATS
50. FNH 413 - Food Safety	LFS	3	Microbial and chemical factors that underlie public health challenges in the food supply chain; prevalence and nature of organisms which cause foodborne diseases; approaches and technologies for improvement of food safety.	MICB 202, CHEM 233

51. FNH 415 - Business Concepts in Food, Nutrition, and Health.	LFS	3	Introduction to and application of business activities in food, nutrition, and health settings.	3RD YR STANDING
52. FNH 425 - Food Science Laboratory III	LFS	6	Integrated course designed to illustrate principles of research and product development in the food industry.	FNH 325, FNH 326
53. FNH 430 - Enology and Wine Biotechnology	LFS	3	Yeasts and bacteria involved in wine making, metabolic pathways leading to the production of flavour and spoilage compounds, genetic improvement of wine yeasts, and red and white wine fermentations. Approaches and technologies for the improvement of wine safety. Sensory evaluation of wines.	
54. FNH 440 - Food Service Systems Management	LFS	3	Management responsibilities in quantity food production with emphasis on menu planning, purchasing and service. Includes planning and equipping food services.	FNH 340
55. FNH 451 - Nutrient Metabolism and Implications for Health	LFS	3	Integration of nutrient and energy metabolism on a whole-body and individual tissue basis and the implication for health. Emphasis will be on regulation of nutrient metabolism.	FNH 350, CAPS 301, BIOC 302
56. FNH 455 - Applied International Nutrition	LFS	3	Applying nutrition concepts and principles in addressing problems of malnutrition and food insecurity in international settings. Basics of developing culturally acceptable, sustainable nutrition intervention programs.	FNH 355
57. FNH 470 - Foundations of Nutrition Care I	LFS	3	The role of nutrition and the application of therapeutic diets in the prevention, etiology, and treatment of gastrointestinal complications/disorders, cardiovascular disease, diabetes, and obesity.	FNH 350, FNH 370
58. FNH 472 - Maternal and Fetal Nutrition	LFS	3	Metabolic adaptations, nutrient metabolism, and special issues during pregnancy that may influence the maternal-fetal nutritional supply.	FNH 350, 3RD YR STANDING
59. FNH 474 - Sport Nutrition	LFS	3	Theory and methods in nutrition education; factors affecting behaviour modification and health promotion. The practice of nutrition education through education, health care delivery or media systems.	
60. FNH 475 - Foundations of Nutrition Care II	LFS	3	The role of nutrition and the application of therapeutic diets in the prevention, etiology and treatment of specialized areas of clinical nutrition.	
61. FNH 477 - Nutrition and Disease Prevention	LFS	3	Evidence-based examination of the role of nutrition in the prevention of chronic disease.	FNH 398
62. FNH 490 - Topics in Food, Nutrition, and Health	LFS	3	Analysis and interpretation of current issues in food, nutrition and health.	
63. FRE 302 - Small Business Management in Agri-food Industries	LFS	3	Emphasizes the building of a business plan by exploring topics such as the planning process and financing, marketing and human resource concepts, as applied to an agri-food business, domestically and internationally.	ECON 101 OR ECON 310, 2ND YEAR STANDING
64. gradFRE 306 - Introduction to Global Food Markets	LFS	3	An overview of global food markets including recent trends (e.g., vertical coordination, strategic alliances, multinationals and small firms in niche markets), marketing and trade institutions such as state-trading enterprises	ECON 101 OR ECON 310, 2ND YR STANDING

			and WTO regulations, issues specific to developing nations, and case studies.	
65. FRE 340 - International Agricultural Development	LFS	3	Characteristics, processes and sources of economic growth, role of agricultural and resource sectors in economic growth, analysis of output and input markets in those sectors, policy failures, tools for empirical analysis of rural markets, growth, and the environment.	ECON 100 OR ECON 101, 2ND YR STANDING
66. FRE 374 - Land and Resource Economics	LFS	3	Willingness to pay, opportunity costs, externalities, and market failures in natural resource markets; dynamic efficiency; economic applications including mineral, marine, forest, land, water, and biodiversity.	ECON 101 OR ECON 310
67. FRE 460 - Economics of Food Consumption	LFS	3	Microeconomics of consumer decisions and public policy in food contexts; foodborne illness; economic causes and consequences of obesity; sin taxes and prohibitions; information campaigns and advertising; labeling; food waste and ethics.	ECON 101 OR ECON 301
68. FRE 490 - Current Issues in Food and Resource Economics	LFS	3	Analysis and interpretation of current issues in food and resource economics.	ECON 101 OR ECON 310
69. LFS 100 - Introduction to Land, Food and Community	LFS	1	Orientation to the programs, learning environment and core values of the Faculty of Land and Food Systems; career programs; survey of professional opportunities and requirements.	
70. LFS 250 - Land, Food and Community I	LFS	6	Introduction to managed systems and concepts of sustainability; economic, ecological and social components; managed landscapes, agri-food systems, and communities; urban and rural systems; the land, food, nutrition and human health continuum.	
71. LFS 340 - First Nations Health and the Traditional Role of Plants	LFS	3	This Interprofessional Health and Human Service (IHHS) course covers the First Nations medical systems and medicinal plants. Bridging the traditional with modern sciences.	
72. LFS 350 - Land, Food, and Community II	LFS	3	Introduction to tools and skills required to assess the economic, ecological, social, and technological components of managed landscapes, agrifood systems and communities comprising the land, food, nutrition and health continuum.	LFS 250
73. LFS 450 - Land, Food, and Community III: Food System Sustainability	LFS	3	Problem-based analysis of complex case studies aimed at increasing the sustainability of the UBC Vancouver campus food system. The main activities are integrated into the ongoing UBC Food System Project.	LFS 350
74. SOCI 342 - Consumers and Consumption	Arts	3	The structure and culture of consuming and consumption.	SOCI 100 OR SOCI 101 OR SOCI 102
75. SOCI 360A - Sociology and Natural Resources	Arts	3	Sociological perspectives on property, resource industries (such as agriculture, fishing, forestry and mining), resource development, and resource communities. May also include examination of social aspects of resource development in the Third World.	SOCI 100 OR SOCI 101 OR SOCI 102

76. SOCI 423 – Sociology of Food	Arts	3	Cultural, economic, and political aspects of food production and consumption, including connections to class, ethnicity, and gender. Food-related social movements will be included.	SOCI 100 OR SOCI 101 OR SOCI 102
77. SOCI 479A - Social Determinants of Health	Arts	3	Relationships between social phenomena (e.g., personal beliefs, lifestyle practices, social support, socio-economic status, social class, gender, and ethnicity) and the health of human populations.	SOCI 100 OR SOCI 101 OR SOCI 102