

# Interdisciplinary food-related academic programs: A 2015 snapshot of the United States landscape

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#### Abstract

Interdisciplinary food-related research and study is a growing field in academia. Each year, more universities add departments, courses, majors, and minors focused on studying food and society and the complexities of growing, processing, distributing, accessing, and consuming food. In this commentary, we present our exploratory findings about interdisciplinary food-related academic programs, including food studies and food systems programs in the United States. This cross-sectional research developed a snapshot of the 2015 landscape of interdisciplinary food-related academic

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programs, provided a preliminary examination of their educational offerings, and will inform future research opportunities. In this formative study, we found 82 interdisciplinary food-related undergraduate programs focused on food. Nineteen program majors, minors, or concentrations had a core disciplinary focus on sustainable agriculture. "Food studies" and "food systems" were the primary focus of 15 undergraduate programs. We found 58 interdisciplinary food-related graduate programs and extracted information on their course offerings. Organizing courses into nine course categories, 78 percent of the programs offered courses in two to five categories, and 22 percent offered courses in six to eight categories. Few courses integrated material from multiple disciplines into a single course, suggesting that these interdisciplinary programs stemmed from

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traditional academic silos. Based on this preliminary work, we propose to further investigate the interdisciplinary nature of food-related academic programs, map their growth trajectory, and solicit feedback from faculty and administrators about their challenges in establishing and maintaining these programs. In future research, we are also interested in exploring job options for graduates of food-related academic programs to inform recruitment strategies and courses of study.

### Keywords

Academic Programs; Agriculture; Food Studies; Food Systems; Higher Education; Nutrition; Sustainability; United States; Universities

### Introduction

Interdisciplinary food-related research and study is a growing field in academia. Each year, the number of universities with departments, courses, majors, and minors focused on studying food and its relationship to culture and society, and the complexities of growing, processing, distributing, accessing, and consuming food, increases (Holt, 2015; Jacobsen et al., 2012; Spiegel, 2012; Weissman, Gantner, & Narine, 2012). This development has been motivated by student desire to learn interdisciplinary approaches to studying food (Holt, 2015; Jacobsen et al., 2012; Spiegel, 2012).

Traditionally, food-related programs have been housed in a single department or school and organized into such fields as Agricultural Science, Food Science, Nutrition Science and Dietetics, and Culinary Arts and Hospitality. Some programs function within their historic missions as land-grant universities that were established in the 1860s to teach applied agricultural subjects (Jacobsen et al., 2012; Spiegel, 2012). In contrast, the modern wave of interdisciplinary food-related programs in higher education-"Food Studies" programs-draw from humanities, social sciences, and natural sciences, following in the footsteps of interdisciplinary programs such as Women's Studies and American Studies that employ multiple academic sectors to solve complex social and political challenges (Berg, Nestle, & Bentley, 2003; Cargill, 2005).

The impetus to develop many of these interdisciplinary food-related academic programs stems from a growing awareness of the relationship between food choices and their impact on local and global issues such as climate change, environmental sustainability, public health, water shortages, and animal rights and welfare (McIntyre, Herren, Wakhungu, & Watson, 2009; Neff, 2014; Neff, Merrigan, & Wallinga, 2015; Pretty et al., 2010; Tomich et al., 2011; Whitmee et al., 2015). As the world population grows, develops, and globalizes, there is an increasing strain on the finite land, water, and energy resources used in the food system (Godfray et al., 2010). Single disciplines are limited in their capacity to address these changing demands on the food supply. One approach to conceptualize these multifaceted issues is to apply systems theory to food systems issues (Sobal, Khan, & Bisogni, 1998). Systems theory takes a big-picture approach to studying the various interrelated components of a system, including cycles, chains, and webs (Sobal et al., 1998). This method, referred to as a "food systems approach," often draws on methods from multiple disciplines to solve complex food system issues. These problems include how to produce an adequate caloric intake, reduce the prevalence of access and distribution challenges, and assure the environmental sustainability for future generations. Some food systems approaches focus on methods within a discipline, while interdisciplinary food systems approaches break down traditional academic silos and teach systems-level methods to problem solving across two or more academic fields.

The first programs in the United States to address interdisciplinary food-related studies and research began in the 1990s at New York University (NYU) and Boston University (BU). Building on an academic program established in the 1920s, NYU currently has a Department of Nutrition, Food Studies, and Public Health in its Steinhardt School of Culture, Education, and Human Development. Initiated by the politically engaged nutritionist Marion Nestle, this department has undergraduate, graduate, and doctoral degree programs in Food Studies in the fields of Nutrition and Dietetics, Food Studies, Food and Restaurant Management, and Public Health (Berg et al., 2003; Nestle & McIntosh, 2010). Renowned chefs Julia Child and Jacques Pépin cofounded Boston University's Gastronomy program, which now allows students to choose from multiple focus areas for a Gastronomy master's degree or earn a graduate certificate in Food Studies (Boston University, n.d.). Since these early programs, numerous universities have developed and launched food studies programs, with a boom over the past decade.

To increase our understanding of the growing field of interdisciplinary food-related academic programs such as Food Studies, Food Systems, and Sustainable Agriculture, our exploratory research goal was to provide a strong foundation for further, more comprehensive research. In this research commentary, we offer a snapshot of the landscape of interdisciplinary food-related academic programs in the U.S. and their educational offerings. We welcome the involvement of representatives of any of these programs in future research.

#### Methods

We used a multipronged approach to identify interdisciplinary undergraduate and graduate foodrelated academic research and study programs in the U.S., including degree and certificate-conferring online programs. To identify interdisciplinary foodrelated academic programs, we established two criteria. First, the program had to publicly market itself in program descriptions as providing interdisciplinary coursework, and/or listings of the coursework had to be in two or more disciplines that address food-related issues. Second, the program had to be a formal academic program of an accredited public or private educational institution that awarded degrees and/or certificates.

For undergraduate programs, we included programs where students could major, minor, or have a concentration in food-related research and study. We excluded community college programs, any programs outside the U.S., and programs that were not yet enrolling students by December 2015 to simplify and focus our research. For graduate programs, we included master's, doctoral degree, or certificate programs.

With these criteria established, we reviewed lists of food and agriculture academic programs compiled by colleagues from the University of California (UC) at Berkeley, Davis, and Santa Cruz. During this stage, we also reviewed food studies and food systems program lists from the Association for the Study of Food and Society, the Sustainable Agriculture Education Association, and the Inter-Institutional Network for Food, Agriculture and Sustainability.<sup>1</sup> The programs gathered in this step were then analyzed to determine if they met our inclusion criteria. At this stage, 49 undergraduate programs and 39 graduate programs were identified.

To supplement this initial list, we performed an internet search using Google during February and March 2015 using the search terms "food studies undergraduate programs" and "food systems undergraduate programs," or "food studies graduate programs" and "food systems graduate programs." From the programs identified by the internet search terms, we reviewed the program description and course listings, if available, to confirm that the program was interdisciplinary. In this stage, an additional 23 undergraduate programs and six graduate programs were identified.

Finally, in fall 2015, we shared our aggregated list with food studies and food systems colleagues to confirm that we had identified known programs, leading to the addition of 10 undergraduate programs and 13 graduate programs.

Once an interdisciplinary food-related academic program was confirmed, we collected the following information: the department(s) and/or school(s) involved, degree awarded, program address and URL, program contact, details on an associated farm or garden program, and when the program was established. We reviewed course listings for undergraduate food-related academic programs when available, but chose not to catalog them as it was not always clear if the courses listed

- Association for the Study of Food and Society: http://www.food-culture.org/food-studies-programs/
- Sustainable Agriculture Education Association: <u>http://www.sustainableaged.org/projects/degree-programs/</u>
- Inter-Institutional Network for Food, Agriculture and Sustainability: <u>http://asi.ucdavis.edu/programs</u>

Note that the sites have been updated since this study, so their current lists will not match the lists in this article.

<sup>&</sup>lt;sup>1</sup> The food studies and food systems program lists were obtained at these sites:

were necessary to fulfill school-wide or degree requirements.

For interdisciplinary graduate food-related academic programs, we obtained the required course listings. Our initial course categories were not developed *a priori*; instead, we developed course categories as we reviewed course listings. First, we distinguished "food studies" and "food systems" courses. Food studies described courses with a focus on cultural, historical, or other academic perspectives on food. For example, a food studies course might examine the importance of grains throughout the world, or issues around hormones in meat production. We defined food systems courses as those that either explicitly used "food systems" in the title or description, or contained subject matter that included a broader examination of the inputs to food production, distribution, and consumption. Their content tended to focus on examinations of current issues in the food system. We found considerable overlap between "food studies" and "food systems" courses, so we combined these categories in our final course groupings.

Figure 1. Categorization Process for Interdisciplinary Food-Related Courses

Hard Sciences/Food Science/Laboratories		Biological and Physical Sciences
Nutrition Nutrition/Environment Public Health		Public Health and Nutrition
Business/Commerce Community Development/Nonprofit Management/Leadership Economics Policy/Government Statistics/Probability		Government/Policy/Economics
Agriculture/Agribusiness	$ \longrightarrow $	Agriculture/Agribusiness
Anthropology Archaeology Art Cultural Studies Gastronomy Gender Studies History History/Culture History/Agriculture History/Environment Literature Philosophy Psychology Sociology Writing		Social Sciences
Design Thinking Other + Methodry/Research/Communications		Methods Courses Supporting Food-Related Research
Environment Sustainability		Environment/Sustainability
Food Studies Food Systems		Food Studies/Food Systems
Culinary Arts Food Services		Food Services/Hospitality/ Culinary Arts

We also distinguished between "food science" and "food services" courses. Food science courses are focused on the chemical and biological characteristics of food and are more lab- and natural science-intensive, such as Food Chemistry and Food Microbiology Laboratory. Food services courses, such as Marketing and Purchasing, focus on the food-service industry through an economic, business, logistics, or managerial lens.

By aggregating offerings from similar disciplines, the original 33 course categories collapsed into an organizational structure that resulted in a final set of nine categories (see Figure 1). The course categories include (in order of prevalence): biological and physical sciences (including food sciences courses); public health and nutrition; government, policy, and/or economics; agriculture and agribusiness; social sciences; methods courses supporting food-related research; environment and sustainability; food studies and food systems; and food services, hospitality, and/or culinary arts.

### Results

Presented below is information we compiled about interdisciplinary food-related academic degree programs in the United States, organized into undergraduate programs and graduate programs.

#### Undergraduate Programs Identified

We identified 83 undergraduate interdisciplinary food-related academic programs offered at 63 universities. The majority of these programs had their core focus in food production, with specializations in agricultural technology, sustainable agriculture, agroecology, horticultural science, plant science, soil science, crop science, and organic farming. We found 19 programs that focused on sustainable agriculture, eight programs self-described as "food systems programs," and seven programs with a "food studies" focus. Six of the programs were interdisciplinary environmental studies programs tied to sustainable agriculture or sustainable farming. There were 21 programs centered on nutrition and the preparation of food, including nutrition science, dietetics, culinary science, culinary arts, and food science. Four programs included a focus on the economic basis of the food system, including

agricultural economics; food business economics; and economics related to development, sustainability, and the environment; and one food security degree. Cultural aspects of food are explored in such majors as gastronomy; ecogastronomy; and food, place, and culture (see Appendix A).

# Graduate Programs Identified

We identified 58 graduate interdisciplinary foodrelated academic programs housed at 42 universities, with a full listing of these graduate programs in Appendix B. Of the 58 graduate interdisciplinary programs, 55 (95%) provided online resources about their programs and course listings. After reviewing course listings for all 55 programs, the totals for each course category were calculated. We found that there were 991 courses in all that we organized into nine categories.

The most prevalent graduate school courses, as displayed in Figure 2, were in the biological and physical sciences (n=183), usually in support of food science research. The second highest course category was in public health and nutrition (*n*=159), followed by government, policy, and economics (n=138). Food Studies and Food Systems courses (n=66) were eighth in prevalence. In order to assess the interdisciplinary nature of these food programs, we evaluated how many different course categories each program's classes belonged to. Within the nine course categories, 78 percent (43 of 55) of the programs offered courses in two to five categories, and 22 percent (12 of 55) offered courses in six to eight categories.

The interdisciplinary food-related academic program field is dynamic. While preparing this commentary for publication, we found that since our research was completed in 2015, more programs had emerged and some programs had been put on hold. We anticipate that the landscape has continued to change and that emergent programs will be identified and included in future research efforts.

# Discussion

This exploratory research was undertaken to develop a snapshot of the interdisciplinary food-



Figure 2. Interdisciplinary Food-Related Academic Graduate Program Courses by Category

related academic programs in the United States to inform future investigations on the breadth of this growing field of research and study. We combined the practical knowledge our colleagues had of established food-related academic programs with a systematic online search for programs that met our eligibility criteria.

While we found many interdisciplinary foodrelated academic programs, our research yielded few truly interdisciplinary courses. Among graduate programs, we observed that many food studies and food systems programs, although offering courses in multiples disciplines, were primarily focused in one area of study. Instead of designing courses that included multiple disciplines into one course, there was a tendency to design programs where the multifaceted knowledge about food was acquired by students taking separate courses in a variety of disciplines. We believe that this course and program design may be due to the fact that many food studies and food systems programs originated in single disciplinary settings and are still growing into the field of interdisciplinary work. There is also the challenge of cost-effective methods to teach interdisciplinary courses, with issues such as funding faculty from single-discipline fields to co-teach an interdisciplinary course, finding funding for fulltime faculty, and hiring faculty trained and specializing in interdisciplinary work. Another explanation for this single-discipline structure stems from historical underpinnings. For instance, single disciplines sometimes have established themselves as the lead food-related authority in an institution and may approach collaboration with another discipline cautiously (Weissman et al., 2012). The addition of interdisciplinary food studies and food systems programs can also create conflict because this new discipline may be competing for the same sources of funding as the established single-discipline departments. For example, an agroecology program may compete for agriculture or environmental funding.

A limitation of our study was that it was a cross-sectional assessment of available interdisciplinary food-related academic programs. Our main search methods were to contact academic food studies and food systems experts and to search for programs using online resources. Schools and/or programs that were not well known, were newly established, or did not have an internet presence at the time of our data-gathering may not have been captured with these methods. In the future, it could prove beneficial to administer a survey to all existing programs with questions that could aid in characterizing their programs. A census could gather program details to give a more complete picture of the past, current, and future directions of the emerging field of food-related academic programs. In future research, more specific data should be asked regarding the age and stage of the program, the number of currently enrolled students, the number of graduates, the jobs that program graduates attain, and a more detailed course analysis (possibly even course syllabi). By learning more about these programs, we could develop typologies of foodrelated academic programs to expand or refine our current findings on interdisciplinary program types such as food studies, food systems, agroecology, and ecogastronomy. In addition, open-ended

questions and select interviews could reveal details about the challenges of establishing and maintaining a program, including defining the program's niche or brand, the vision for the program, current opportunities, and prospective opportunities for collaboration.

#### Conclusions

The research presented here is a snapshot of the interdisciplinary food-related academic programs landscape that is emerging at universities across the country. Our preliminary findings reveal that many schools continue to focus their course offerings in traditional academic strengths, and this may indicate a need or opportunity to expand more interdisciplinary course offerings.

Metrics need to be developed for the emerging field of food-related academic programs that evaluate their curricula as well as the job attainment of graduates. Possible directions include developing metrics to assess in which fields students find employment, and determining if training prepares students for previously existing jobs exclusively or for new types of jobs and career paths. These data could be obtained through a survey of program graduates and could yield valuable information to accelerate the development of programs that better fulfill the needs of current and future students.

The widespread presence of interdisciplinary food-related academic programs in the U.S. identified in this formative study appears to have emerged fairly recently. These programs are likely developing in response to a growing sense of need to address what appears to be multiple social, environmental, and economic failings of the current food system. We hope that these academic programs will provide the pipeline of intellectual and human resources needed to solve these complex, interdisciplinary food-related problems.

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Institution Name	School/Department/Programs Involved	Degree Name	Degree Awarded
Appalachian State University	Program of Sustainable Development	Sustainable Development (BS) - Agroecology and Sustainable Agriculture Concentration	BS <sup>a</sup> concentration
California State Polytechnic University, San Luis Obispo	Department of Food Science and Nutrition	Nutrition	BS
	College of Agriculture, Food and Environmental Sciences (CAFES), Center for Sustainability	Sustainable Agriculture	Minor
California State University, Stanislaus	College of the Arts, Humanities, and Social Sciences; Department of Agricultural Studies	Agricultural Studies, Permaculture	BS
Clemson University	College of Agriculture, Forestry, and Life Sciences; School of Food, Nutrition, and Packaging Sciences	Food Science; Packaging Science	BS
	College of Entomology, Soil, and Plant Sciences	Soils and Sustainable Crop Systems	BS
College of the Atlantic	None specified	Farming and Food Systems	BS
Culinary Institute of America	New York Campus	Applied Food Studies	BPS <sup>b</sup>
City University New York, Hunter College	School of Urban Public Health	Nutrition and Food Science	BS
Delaware Valley College	Department of Plant Science	Sustainable Agriculture Systems	BS
Evergreen State College	None specified	Food, Health, and Sustainability	BA <sup>c</sup> or BS
		Food, Place, and Culture	BA or BS
		Practice of Sustainable Agriculture	BA or BS
Ferrum College	School of Natural Sciences and Mathematics, Department of Agricultural Sciences	Agriculture with emphasis in Agroecology	BS emphasis area
Fort Lewis College	School of Natural and Behavioral Sciences, Department of Biology and Agriculture	Agroecology/Sustainable Agriculture	Minor
George Mason University	College of Health and Human Services	Global and Community Health, Nutrition Concentration	BS
Georgia Southern University	College of Health and Human Sciences	Nutrition and Food Science	BS
Green Mountain College	None specified	Sustainable Agriculture and Food Production	BA
Kentucky State University	College of Agriculture, Food Science, and Sustainable Systems	Agriculture, Food, and Environment	BS
Le Cordon Bleu of Culinary Arts (USA) (online)	Le Cordon Bleu	Culinary Arts/ Pâtisserie and Baking Program/Hospitality & Restaurant Management Program/Culinary Management Online	BA/Associates

# Appendix A. Undergraduate Food-related Academic Programs: 2015 Snapshot

Institution Name	School/Department/Programs Involved	Degree Name	Degree Awarded
Lipscomb University	College of Leadership and Public Service: Institute for Sustainable Practice	Environmental and Sustainability Science, focus on Agroecology	BA
	Department of Nutrition	Food Systems Management	BS
Loyola University Chicago	Institute of Environmental Sustainability	Environmental Science: Food Systems and Sustainable Agriculture	BS
Michigan State University	Department of Food Science and Human Nutrition, College of Agriculture and Natural Resources	Food Science and Human Nutrition	BS
	College of Agriculture and Natural Resources, Department of Plant, Soil, and Microbial Sciences	Sustainable Agriculture and Food Systems	Minor
Montana State University	Colleges of Agriculture and Education, Health and Human Development	Sustainable Food and Bioenergy Systems	BS
Montclair State University	College of Education and Human Services; Department of Nutrition and Food Science	Nutrition and Food Science with a concentration in Food Systems	BS
Morningside College	Regina Roth Applied Agricultural and Food Studies	Applied Agricultural and Food Studies	BA, BS, minor
New School for Public Engagement	The New School For Public Engagement	Food Studies	BA or BS
North Carolina State University	Department of Crop Science	Crop science with concentrations in: Agroecology, Agronomic Business, Agronomic Science, Crop Biotechnology, Crop Production	BS
	Department of Soil Science	Soil Science	BS
The New School	Schools for Public Engagement	Food Studies	BA or BS
New York University	Steinhardt School of Culture, Education, and Human Development; Department of Nutrition, Food Studies, and Public Health	Food Studies	BS
		Nutrition and Dietetics	BS
Ohio State University	College of Food, Agricultural, and Environmental Sciences	Environment, Economy, Development, and Sustainability	BS and minor
Pennsylvania State University	College of Agricultural Sciences, Plant Science	Plant Sciences	BS
Prescott College	None specified	Environmental Studies and Sustainability-Agroecology	BS
Purdue University	College of Agriculture, Department of Food Science	Food Science	BS
		Culinary Science	BS
Ramapo College of New Jersey	School of Social Science and Human Services	Food Studies	Minor

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Institution Name	School/Department/Programs Involved	Degree Name	Degree Awarded
Rutgers	Department of Food Science, School of Environmental and Biological Science	Food Science	BS
Stanford University	School of Earth, Energy, and Environmental Sciences; Earth Systems Program	Sustainable Food and Agriculture Track	BS track
Sterling College	Sterling College	Sustainable Food Systems	BA
Syracuse University	Department of Public Health, Food Studies, and Nutrition	Nutrition	BS
		Nutrition Science	BS
		Food Studies	BS
University of California, Berkeley	College of Natural Resources (CNR), Department of Environmental Science, Policy & Management (ESPM)	Food Systems Minor	Minor
University of California, Davis	Agricultural Sustainability Institute	Sustainable Agriculture and Food Systems	BS
	Department of Agricultural and Resources Economics	Agricultural Economics	BS
	College of Agricultural and Environmental Sciences, Department of Food Science and Technology	Food Science	BS
University of California, Santa Cruz	College of Environmental Studies	Environmental Studies, Agroecology and Sustainable Agriculture Emphasis	BS
Unity College	The Center for Sustainability and Global Change	Sustainable Agriculture	BS
University of Florida	Horticultural Sciences Department	Horticultural Science	BS and minor
University of Georgia	College of Agricultural and Environmental Science, Department of Food Science and Technology	Food Science and Technology	BS
University of Hawaii, West O'ahu	Bachelor of Applied Sciences Programs	Sustainable Community Food Systems Concentration	BAS <sup>d</sup> concentration
University of Kentucky	College of Agriculture, Food, and Environment	Sustainable Agriculture	BS and minor
University of Maine	Departments of Plant, Soil and Environmental Sciences, Biology, and Resource Economics and Policy; Sustainable Agriculture Program	Sustainable Agriculture	BS
University of Massachusetts, Amherst	Stockbridge School of Agriculture	Sustainable Food and Farming	BS
University of Michigan	College of Literature, Science and Arts	Sustainability Food Systems Minor	Minor
University of Minnesota	Institute for Sustainable Agriculture	Sustainable Agricultural Systems	Minor
University of Missouri	College of Agriculture, Food, and Natural Resources; Department of Agriculture	Sustainable Agriculture	BS and minor

Institution Name	School/Department/Programs Involved	Degree Name	Degree Awarded
University of Montana	College of Humanities and Sciences, Environmental Studies Department	Environmental Studies, Sustainable Food and Farming Emphasis	BA emphasis
University of New Hampshire	Dual Degree in EcoGastronomy	EcoGastronomy	Dual Degree
	Sustainable Agriculture and Food Systems	Sustainable Agriculture and Food Systems	BS, BA
The University of Southern Mississippi	Department of Nutrition and Food Systems	Nutrition Science	BS
		Nutrition and Dietetics	BS
University of Tennessee	Institute for Agriculture, Department of Plant Sciences	Organic Production	BS concentration
University of Vermont	Plant and Soil Science	Ecological Agriculture	BS and minor
	Food Systems Initiative	Food Systems Minor	Minor
University of Washington	School of Public Health, Nutritional Sciences Program	Nutritional Sciences	Minor
University of Wisconsin, Madison	Department of Food Science	Food Science	BS
University of Wisconsin, Stout	Food Science and Technology Program	Food Science and Technology	BS
University of Wyoming	Department of Plant Sciences and Ecosystems Science and Management	Agroecology	BS and minor
Virginia Polytechnic Institute and State University	Departments of Horticulture; Agricultural, Leadership, and Community Education; Human Nutrition, Foods, and Exercise; Agriculture and Life Sciences; Animal and Poultry Sciences; Crop and Soil Environmental Sciences; Plant Pathology, Physiology, and Weed Science	Civic Agriculture and Food Systems	Minor
Warren Wilson College	Department of Environmental Studies	Environmental Studies with emphasis on Sustainable Agriculture	BA, BS concentration
Washington State University	College of Agricultural, Human, and Natural Resource Sciences	Organic Agricultural Systems	BS
		Agricultural Technology and Production Management	BS
		Agricultural Education	BS
		Agricultural and Food Business Economics	BS
		Agricultural and Food Security	BS
Western Washington University	Fairhaven College of Interdisciplinary Studies	Self-Designed Concentration in Sustainable Agriculture	BA concentration
Xavier University (in Ohio)	Land, Agriculture, and Community	Land, Farming, and Community	BA

<sup>a</sup> Bachelor of Science; <sup>b</sup> Bachelor of Professional Studies; <sup>c</sup> Bachelor of Arts; <sup>d</sup> Bachelor of Applied Sciences

School/Department/Programs Involved	Degree Name	Degree Awarded
Metropolitan College	Gastronomy	MLA <sup>a</sup>
	Food Studies	Certificate
Falk School of Sustainability	Food Studies	MA <sup>b</sup>
None specified	Sustainable Food Systems	MPhil⁰
College of Health and Human Services; Department of Nutrition and Food Studies, Department of Geography and Geoinformation Science	Food Security	Certificate
Not specified	Sustainable Food Systems	MS <sup>d</sup>
College of Health and Human Services, Department of Applied Health Sciences	Public Health Nutrition	MS Concentration
Departments of Anthropology, Archeology, Political Science, Nutrition, Biology, Geography, Comparative Literature	Anthropology of Food	PhD <sup>e</sup>
Sustainable Agriculture	Sustainable Agriculture	MS, PhD
Bloomberg School of Public Health	Food System, Environment and Public Health	Certificate
Urban Food Systems; Horticulture, Forestry, and Recreation	Horticulture with an emphasis in Food Systems	MS
College of Agriculture, Food Science, and Sustainable Systems	Environmental Studies	MS
Department of Food Systems and Society	Food Systems and Society	MS
Plant, Soil and Microbial Sciences	Ecological Food & Farming Systems	MS, PhD
Department of Agricultural, Food, and Resource Economics	Agricultural, Food, and Resource Economics	MS, PhD, Dual Degrees
Department of Health and Human Development	Food, Family, and Community Health Sciences Option; Sustainable Food Systems Program	MS
Anthropology	Food Studies	MA Minor
Steinhardt School of Culture, Education, and Human Development; The Department of Nutrition, Food Studies, and Public Health	Food Studies, Global Public Health/Nutrition and Dietetics, Global Public Health/Food Studies, Nutrition	MS, PhD
Agribusiness and Applied Economics	Agribusiness and Applied Economics	MS
Plant Sciences, Veterinary and Microbiological Sciences, and Agricultural and Biosystems Engineering	Cereal Sciences	MS, PhD
	School/Department/Programs InvolvedMetropolitan CollegeFalk School of SustainabilityNone specifiedCollege of Health and Human Services; Department of Nutrition and Food Studies, Department of Geography and Geoinformation ScienceNot specifiedCollege of Health and Human Services, Department of Applied Health SciencesDepartments of Anthropology, Archeology, Political Science, Nutrition, Biology, Geography, Comparative LiteratureSustainable AgricultureBloomberg School of Public HealthUrban Food Systems; Horticulture, Forestry, and RecreationCollege of Agriculture, Food Science, and Sustainable SystemsDepartment of Food Systems and SocietyPlant, Soil and Microbial SciencesDepartment of Health and Human DevelopmentAnthropologySteinhardt School of Culture, Education, and Human Development; The Department of Nutrition, Food Studies, and Public HealthAgribusiness and Applied EconomicsPlant Sciences, Veterinary and Microbiological Sciences, and Agricultural and Biosystems Engineering	School/Department/Programs Involved Degree Name   Metropolitan College Gastronomy   Falk School of Sustainability Food Studies   None specified Sustainable Food Systems   College of Health and Human Services; Department of Nutrition and Food Studies, Department of Geography and Geoinformation Science Food Security   Not specified Sustainable Food Systems   College of Health and Human Services, Department of Applied Health Sciences Public Health Nutrition   Department of Applied Health Sciences Public Health Nutrition   Departments of Anthropology, Archeology, Geography, Comparative Literature Sustainable Agriculture   Sustainable Agriculture Sustainable Agriculture   Bloomberg School of Public Health Food Systems   Porticul Science, Nutritou, Food Science, and Sustainable Systems Environmental Studies   College of Agriculture, Food Science, and Sustainable Systems Environmental Studies   Department of Food Systems and Society Food Systems and Society   Plant, Soil and Microbial Sciences Ecological Food & Farming Systems   Department of Health and Human Food Studies   Department of Health and Human Food Studies   Steinhardt School of Cultu

# Appendix B. Graduate Food-related Academic Programs: 2015 Snapshot

Institution Name	School/Department/Programs Involved	Degree Name	Degree Awarded
	School of Natural Resource Sciences; Departments of Entomology, Environmental and Conservation Sciences, and Natural Resources Management	Entomology	MS, PhD
	Agribusiness and Applied Economics	International Agribusiness	MS
	School of Food Systems; faculty participants from the Colleges of Agriculture, Food Systems, and Natural Resources; Arts, Humanities, and Social Sciences; Engineering and Architecture; Human Development and Education; and Science and Mathematics	International Infectious Disease Management and Biosecurity	MS, PhD
	Plant Pathology	Plant Pathology	MS, PhD
	Plant Sciences	Plant Sciences	MS, PhD
	Agriculture, Food Systems, and Natural Resources; Arts, Humanities and Social Sciences; Engineering and Architecture; Human Development and Education; and Science and Math	Food Safety	MS, PhD
	Agricultural and Biosystems Engineering	Agriculture and Biosystems Engineering	MS, PhD
Ohio State University	Environmental Science Graduate Program with faculty from Colleges of Biological Sciences; Engineering; Food, Agricultural, and Environmental Sciences; Mathematical and Physical Sciences; Medicine; Social and Behavioral Sciences; and Veterinary Medicine	Environmental Science, Agrosystems Science Graduate Specialization	MS, PhD
Rutgers	Food Sciences	Food Science	MS, PhD
Santa Clara University	Leavey School of Business, Food and Agribusiness Institute	Food and Agribusiness Concentration	MBA Concentration
Syracuse University	Nutrition Science and Dietetics	Nutrition Science	MA or MS
Texas A & M University	The Departments of Soil & Crop Sciences, Agricultural Economics, Veterinary Pathobiology, and Veterinary Physiology & Pharmacology	Regulatory Science in Food Systems	Certificate
Texas Women's	Nutrition & Food Sciences	Food Science	MS
University		Food Systems Administration	MS
Tufts University (Online)	Friedman School of Nutrition Science and Policy	Sustainable Agriculture and FoodCertificate Systems	
University of California,	School of Public Health	Public Health Nutrition	MPH <sup>f</sup>
Berkeley	College of Natural Resources	Environmental Science, Policy, PhD and Management	
University of California, Davis	Food Science and Technology	Food Science	MS, PhD

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Institution Name	School/Department/Programs Involved	Degree Name	Degree Awarded
University of California, Santa Cruz	Environmental Studies Department	Environmental Studies with a focus on Agroecology and Sustainable Agriculture	PhD
University of Massachusetts	College of Natural Sciences	Sustainability Science with a focus on Sustainably Food Systems and Agriculture	MS
University of Michigan	School of Natural Resources and Environment	Sustainable Systems, Food Systems Theme	MS
University of Minnesota	Minnesota Institute for Sustainable Agriculture	Sustainable Agricultural Systems	Minor for MS, MA & PhD
		Food Science and Nutrition	MS, PhD
University of Missouri	Food Science College of Agriculture, Food and Natural Resources	Food Science	MS, PhD
University of Missouri (Online)	Center for Agroforestry	Agroforestry	MS
University of Montana	College of Humanities and Sciences	Environmental Studies, Sustainable Food and Farming Emphasis	MS emphasis
University of North Carolina, Chapel Hill	Department of Anthropology	Food, Environment, and Sustainability	Concentration
University of North Texas School of Public Health	School of Public Health	Certificate in Food Security and Public Health	Certificate
University of Oregon	College of Arts and Sciences, Environmental Studies Program	Food Studies	Specialization
University of the Pacific	College of the Pacific	Food Studies	MA
		Food Systems Graduate Program	n MS
		Animal, Nutrition, and Food Science	PhD
University of Rhode Island	College of the Environment and Life Sciences	Biological and Environmental Systems, Specialization in Sustainable Agriculture and Food Systems	MS, PhD Specialization d
The University of Southern Mississippi	College of Health; Department of Nutrition & Food Systems	Nutrition and Food Systems	MS
University of Vermont	Nutrition and Food Sciences Department	Nutrition and Food Studies	MS
University of Wisconsin- Madison	College of Agricultural and Life Sciences	Agroecology	MS
University of Wisconsin- Stevens Point	School of Health Promotion and Human Development	Sustainable and Resilient Food Systems	MS
Washington State University	College of Agricultural, Human, and Natural Resource Sciences; Department of Horticulture	Agriculture	MS

<sup>a</sup> Master of Liberal Arts; <sup>b</sup> Master of Arts; <sup>c</sup> Master of Philosophy; <sup>d</sup> Master of Science; <sup>e</sup> Doctor of Philosophy; <sup>f</sup> Master of Public Health