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

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Submitted July 27, 2017 / Accepted July 28, 2017 / Published online December 13, 2017

Citation: Hartle, J. C., Cole, S., Trepman, P., Chrisinger, B. W., & Gardner, C. D. (2017). Interdisciplinary food-related academic programs: A 2015 snapshot of the United States landscape. Journal of Agriculture, Food Systems, and Community Development, 7(4), 35–49. http://dx.doi.org/10.5304/jafscd.2017.074.006

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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 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

Disclosure
Jennifer C. Hartle and Benjamin W. Chrisinger were supported by the National Institutes of Health T32 HL007034 Grant; Paula Trepman was supported by the Leadership in Health Disparities Program, Stanford Center of Excellence in Diversity in Medical Education.
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 Uni-
versity’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 food-related academic research and study programs in the U.S., including degree and certificate-conferring online programs. To identify interdisciplinary food-related 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.¹ 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

¹ The food studies and food systems program lists were obtained at these sites:
- Association for the Study of Food and Society: [http://www.food-culture.org/food-studies-programs/](http://www.food-culture.org/food-studies-programs/)
- Sustainable Agriculture Education Association: [http://www.sustainableaged.org/projects/degree-programs/](http://www.sustainableaged.org/projects/degree-programs/)
- Inter-Institutional Network for Food, Agriculture and Sustainability: [http://asi.ucdavis.edu/programs](http://asi.ucdavis.edu/programs)

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

![Diagram showing course categories and their relationships]

- Hard Sciences/Food Science/Laboratories
  - Biological and Physical Sciences
  - Public Health and Nutrition
- Business/Commerce
  - Government/Policy/Economics
- Agriculture/Agribusiness
  - Social Sciences
- Anthropology
  - Methods Courses Supporting Food-Related Research
- Archaeology
- Art
- Cultural Studies
- Gastronomy
- Gender Studies
- History
- History/Culture
- History/Agriculture
- History/Environment
- Literature
- Philosophy
- Psychology
- Sociology
- Writing
- Design Thinking
- Environment
  - Environment/Sustainability
- Sustainability
- Food Studies
  - Food Studies/Food Systems
- Food Systems
- Culinary Arts
  - Food Services/Hospitality/Culinary Arts
  - Food Services
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; eco-gastronomy; and food, place, and culture (see Appendix A).

Graduate Programs Identified
We identified 58 graduate interdisciplinary food-related 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-
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 food-related 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 multiple 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 full-time 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 food-related 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.

Acknowledgments
The authors would like to acknowledge the contributions of Daniel Press, Ann Thrupp, Tom Tomich, Josephine Hau, and John Rafael, who helped us lay the foundation to our work, and of Jennifer Otten, Pamela Rhubart Berg, and Roni Neff, who provided expert reviews of our initial drafts.
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# Appendix A. Undergraduate Food-related Academic Programs: 2015 Snapshot

| 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 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 | BPSb |
| 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 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 |
| 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         |
| 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 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    |
| University of Southern Mississippi     | Department of Nutrition and Food Systems                                                          | Nutrition Science                                                          | 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   |
| 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             |
| Washington State University            |                                                                                                  | Agricultural Technology and Production Management                          | BS             |
| Washington State University            |                                                                                                  | Agricultural Education                                                     | 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             |

* Bachelor of Science;  † Bachelor of Professional Studies;  ‡ Bachelor of Arts;  § Bachelor of Applied Sciences
## Appendix B. Graduate Food-related Academic Programs: 2015 Snapshot

| Institution Name                      | School/Department/Programs Involved                                                                 | Degree Name                  | Degree Awarded |
|--------------------------------------|----------------------------------------------------------------------------------------------------|-----------------------------|----------------|
| Boston University                    | Metropolitan College                                                                                | Gastronomy                  | MLA<sup>a</sup> |
|                                      | Food Studies Certificate                                                                            |                             |                |
| Chatham University                   | Falk School of Sustainability                                                                       | Food Studies                | MA<sup>b</sup> |
| College of the Atlantic              | None specified                                                                                     | Sustainable Food Systems    | MPhil<sup>c</sup>|
| George Mason University              | 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> |
| Indiana State University             | College of Health and Human Services, Department of Applied Health Sciences                         | Public Health Nutrition     | MS Concentration |
| Indiana University, Bloomington      | Departments of Anthropology, Archeology, Political Science, Nutrition, Biology, Geography, Comparative Literature | Anthropology of Food        | PhD<sup>e</sup> |
| Iowa State University                | Sustainable Agriculture                                                                           | Sustainable Agriculture     | MS, PhD        |
| Johns Hopkins University             | Bloomberg School of Public Health                                                                  | Food System, Environment and Public Health | Certificate |
| Kansas State University              | Urban Food Systems; Horticulture, Forestry, and Recreation                                         | Horticulture with an emphasis in Food Systems | MS             |
| Kentucky State University            | College of Agriculture, Food Science, and Sustainable Systems                                      | Environmental Studies       | MS             |
| Marylhurst College (Online with some on-campus courses) | Department of Food Systems and Society                                                            | Food Systems and Society    | MS             |
| Michigan State University            | 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 |
| Montana State University             | Department of Health and Human Development                                                         | Food, Family, and Community Health Sciences Option; Sustainable Food Systems Program | MS             |
| New Mexico State University          | Anthropology                                                                                       | Food Studies                | MA Minor       |
| New York University                  | 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       |
| North Dakota State University        | Agribusiness and Applied Economics                                                                  | Agribusiness and Applied Economics | MS             |
|                                      | Plant Sciences, Veterinary and Microbiological Sciences, and Agricultural and Biosystems Engineering | Cereal Sciences             | MS, PhD        |

<sup>a</sup> MLA, Master of Liberal Arts

<sup>b</sup> MA, Master of Arts

<sup>c</sup> MPhil, Master of Philosophy

<sup>d</sup> MS, Master of Science

<sup>e</sup> PhD, Doctor of Philosophy
| 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 Math | 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 University | Nutrition & Food Sciences                                                                       | Food Science                                        | MS             |
|                        | Friedman School of Nutrition Science and Policy                                                   | Sustainable Agriculture and Food Certificate Systems |                |
| University of California, Berkeley | School of Public Health                                                                           | Public Health Nutrition                             | MPH            |
|                        | College of Natural Resources                                                                     | Environmental Science, Policy, and Management       | PhD            |
| University of California, Davis | Food Science and Technology                                                                      | Food Science                                        | MS, PhD        |
| 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, MS, PhD    |
|                                        |                                                                          | Animal, Nutrition, and Food Science                                       |                |
| 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 |
| 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             |

* Master of Liberal Arts; † Master of Arts; ‡ Master of Philosophy; § Master of Science; ‡ Doctor of Philosophy; † Master of Public Health