Hostos Community College
Of
The City University of New York
Proposal to Establish
A Program in Food Studies Leading to
The Degree in Associate in Science (A.S.)
Effective Fall 2015
Sponsored by the Departments
Natural Sciences
Education and Community Health
English

PROPOSAL APPROVED BY
HOSTOS COMMUNITY COLLEGE CURRICULUM, NOVEMBER 4TH 2014
HOSTOS COMMUNITY COLLEGE SENATE, DECEMBER 18TH 2014

Christine Mangino, EdD
Vice-President, Office of Academic Affairs
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State Education Submission Form

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Application for Registration of a New Program

Program registration is based on standards in the Regulations of the Commissioner of Education. Section 52.1 defines the curricula that must be registered. The Department registers individual curricula rather than the institution as a whole, but the registration process addresses major institutional elements. It is the chief means by which the Regents support the quality of college and university programs.

STOP

This application should NOT be used for the following types of program proposals:

- Programs Preparing Teachers, Educational Leaders, and Other School Personnel;
- Programs Preparing Licensed Professionals;
  - Revisions to Existing Registered Programs; or
  - Programs Leading to a credit-bearing Certificate or Advanced Certificate.

The application materials for those types of proposals can be found at:
http://www.hchigher.nysed.gov/ocue/aipr/register.htm

Doctoral programs: please contact the Office of College and University Evaluation (OCUE).

Directions for submission of proposal:

1. Create a single PDF document that includes the following completed forms:
   - Application for Registration of a New Program
   - Master Plan Amendment Supplement and Abstract (if applicable)
   - External Review of Certain Degree Programs and Response (if applicable)
   - Application to Add the Distance Education Format to a New or Registered Programs (if applicable)
   - CEO (or Designee) Approval Form

2. Create a separate PDF document for any required syllabi (see Task 3 for syllabi requirements.).

3. Attach the PDF documents to an e-mail.

4. Send e-mail to OCUERevAdmin@mail.nysed.gov

When submitting to the mailbox, include the following elements in the subject line of the e-mail:
Institution Name, Degree Award, and Program Title

E.g., Subject: AAA College, New Program, Master of Science, English Literature

1 CUNY and SUNY institutions, contact System Administration for proposal submission process.
## Task 1: Institution and Program Information

### Institution Information

<table>
<thead>
<tr>
<th>Institution Name:</th>
<th>Hostos Community College</th>
</tr>
</thead>
<tbody>
<tr>
<td>Institution Code (6 digits):</td>
<td>371500</td>
</tr>
</tbody>
</table>

*The name and code of the institution should reflect the information found on the Inventory of Registered Programs*

<table>
<thead>
<tr>
<th>Institution Address:</th>
<th>500 Grand Concourse</th>
</tr>
</thead>
<tbody>
<tr>
<td>City:</td>
<td>New York</td>
</tr>
<tr>
<td>State/Country:</td>
<td>New York</td>
</tr>
<tr>
<td>Zip:</td>
<td>10451</td>
</tr>
</tbody>
</table>

### Regents Regions:

New York City (New York County (Manhattan), Bronx County, Kings County, (Brooklyn), Queens County, Richmond County (Staten Island)

| Specify campus(s) of the institution where program is offered, if other than the main campus. | N/A |

*The name and code of the location(s) should reflect the information found on the Inventory of Registered Programs*

| Specify any other additional campus(s) where the program is offered besides the ones selected above: | N/A |

| If any courses will be offered off campus, indicate the location and number of courses and credits; | N/A |

| If the program will be registered jointly with another institution, please provide the partner institution's name. |
Program Information for New Programs

<table>
<thead>
<tr>
<th>Program Title:</th>
<th>Food Studies</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Degree Award:</strong></td>
<td>Associate in Science</td>
</tr>
<tr>
<td><strong>HEGIS code:</strong></td>
<td>1305.00 Foods &amp; Nutrition</td>
</tr>
<tr>
<td><strong>Number of Credits:</strong></td>
<td>60</td>
</tr>
</tbody>
</table>

* If the program contains multiple options or concentrations that affect the number of program credits, list the total number of program credits required for each option:

<table>
<thead>
<tr>
<th>Option/Concentration Name:</th>
<th>Credits:</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
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</table>

If program is part of a dual degree program, provide the following information:

<table>
<thead>
<tr>
<th>Program Title:</th>
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<tbody>
<tr>
<td></td>
</tr>
<tr>
<td><strong>Degree Award:</strong></td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td><strong>HEGIS code:</strong></td>
</tr>
</tbody>
</table>

Section III. Contact Information

<table>
<thead>
<tr>
<th>Name of contact person</th>
<th>Felix Cardona</th>
</tr>
</thead>
<tbody>
<tr>
<td>Title of contact person:</td>
<td>Dean</td>
</tr>
<tr>
<td>Telephone</td>
<td>718-518-6664</td>
</tr>
<tr>
<td>Fax</td>
<td>718-518-6829</td>
</tr>
<tr>
<td>Email</td>
<td><a href="mailto:fcardona@hostos.cuny.edu">fcardona@hostos.cuny.edu</a></td>
</tr>
</tbody>
</table>
**Task 2 - Proposed Program Information**

Guidance for this task can be found by clicking here: [Department Expectations: Admissions, Academic Support Services, Credit for Experience and Program Assessment and Improvement](#).

Relevant Regulations for this task can be found by clicking here: [Relevant Regulations for Task 2](#).

**a. Program format**

Check all scheduling, format, and delivery features that apply to the proposed program. Unless otherwise specified below, it is assumed the proposed program may be completed through a full-time, day schedule. Format definitions can be found by clicking here: [Format Definitions](#).

- [ ] **Evening**: All requirements for the award must be offered during evening study.
- [ ] **Weekend**: All requirements for the award must be offered during weekend study.
- [ ] **Evening/Weekend**: All requirements for the award must be offered during a combination of evening and weekend study.
- [ ] **Day Addition**: For programs having EVENING, WEEKEND, or EVENING/WEEKEND formats, indicates that all requirements for the award can also be completed during traditional daytime study.
- [ ] **Not Full-Time**: The program cannot be completed on a full-time basis, e.g., an associate degree that cannot be completed within two academic years. Such programs are not eligible for TAP payments to students.
- [ ] **5-Year baccalaureate**: Indicates that because of the number of credits required, the program is approved as a 5-year program with five-year State student financial aid eligibility.
- [ ] **4.5 Year baccalaureate**: Indicates that because of the number of credits required, the program is approved as a 4.5-year program with 4.5-year State student financial aid eligibility.
- [ ] **Upper-Division**: A program comprising the final two years of a baccalaureate program. A student cannot enter such a program as a freshman. The admission level presumes prior completion of the equivalent of two years of college study and substantial prerequisites.
- [ ] **Independent Study**: A major portion of the requirements for the award must be offered through independent study rather than through traditional classes.
- [ ] **Cooperative**: The program requires alternating periods of study on campus and related work experience. The pattern may extend the length of the program beyond normal time expectations.
- [ ] **Distance Education**: 50% or more of the course requirements for the award can be completed through study delivered by distance education.
- [ ] **External**: All requirements for the award must be capable of completion through examination, without formal classroom study at the institution.
- [ ] **Accelerated**: The program is offered in an accelerated curricular pattern which provides for early completion. Semester hour requirements in Commissioner's Regulations for instruction and supplementary assignments apply.
- [ ] **Standard Addition**: For programs having Independent, Distance Education, External, OR Accelerated formats, indicates that all requirements for the award can also be completed in a standard, traditional format.
- [ ] **Bilingual**: Instruction is given in English and in another language. By program completion, students are proficient in both languages. This is not intended to be used to identify programs in foreign language study.
- [ ] **Language Other Than English**: The program is taught in a language other than English.
- [ ] **Other Non-Standard Feature(s)**: Please provide a detailed explanation.
b. Diploma Programs

If the program is credit bearing and will lead to a Diploma or Advanced Diploma, list the 5-digit program code of the registered degree program(s) to which the credits will apply:

c. Program Description and Purpose

1) **Provide a brief description of the program as it will appear in the institution’s catalog.**

*Answer:* The Hostos Community College Food Associate's Degree program is an interdisciplinary field of study that focuses on the importance of food and food policy as a complex political, economic, and social system. The field incorporates a variety of complex networks, ideologies, environments, consumers and industry sectors. Through the study of these interrelated systems, food studies uses multiple disciplines to examine social, environmental, political and public health issues in the local and global food system.

Food studies students will also gain familiarity with broader contexts: food systems, food movements, emerging issues in the food industry and jobs in the food sector. Through experience based partnerships and internships, students will develop skills necessary to both obtain employment in a related sector, and help improve the food environment in the Bronx and the greater New York City region.

The proposed program is designed to help students gain skills and experience needed to either transfer to Bachelor's programs in related fields or get jobs in the industry. The Associate's Degree program will be complimented by opportunities to participate in concurrent offerings in the College's Workforce Development program.

2) **List the educational and (if appropriate) career objectives of the program.**

1. **Answer:** Understand and articulate complex dynamics of urban, regional, and global food systems, including their environmental, social, political, geographic, public health, and cultural dimensions;

2. Examine the socio-political dimensions of food access and security on a local, national, and global scale;

3. Identify social, organizational, policy, and economic innovations emerging in response to growing food system inequities in similar communities (locally, nationally, and globally); and

4. Gain first-hand knowledge and skills in food systems sectors (e.g., for profit; non-profit; local government) through field experiences and enriched internship programs, leading to enhanced opportunities for job placement and leadership in diverse sectors.

5. Graduate with the necessary skills, certifications, and curricular articulations to transfer to related Baccalaureate degrees or begin a career in steady growth jobs within the sector.

3) **How does the program relate to the institution’s mission and/or master plan?**

*Answer:* The institution's mission is rooted in providing access to higher education to historically underserved communities and promoting social and economic justice through its academic programs and opportunities for careers in the allied health sector. The HCC Strategic Plan affirms the importance of adaptability, experimentation and the ability to innovate in response to changing circumstances. The Food Studies program is consistent with the institution's mission and strategic plan.

4) **What is the documented need for this program?**

*Answer:* The documented health disparities that have a correlation with the relative inaccessibility of healthful food choices in underserved communities; the significance of the food sector in New York City and in particular, the Bronx; the anticipated growth in the various food sectors (Karp Resources, 2013); the potential economic and health benefits of food industry growth (Healthier Diet and a Stronger Economy, Food Policy Center 2013); and the interest expressed by students through surveys.

5) **Describe the role of faculty in the program’s design.**

*Answer:* Faculty involvement has been critical in the conceptualization of the curriculum and the program focus. The process included faculty from multiple departments reflecting the interdisciplinary nature of the program. All curriculum was vetted through a faculty program committee and thereafter the institutional governance process.
6) Describe the input by external partners, if any (e.g., employers and institutions offering further education).

Answer:

7) What are the anticipated Year 1 through Year 5 enrollments?

Answer: Estimated

<table>
<thead>
<tr>
<th>Year 1</th>
<th>Year 2</th>
<th>Year 3</th>
<th>Year 4</th>
<th>Year 5</th>
</tr>
</thead>
<tbody>
<tr>
<td>50</td>
<td>60</td>
<td>84</td>
<td>110</td>
<td>133</td>
</tr>
</tbody>
</table>

d. Admissions

1) List all program admission requirements (or note if identical to the institution’s admission requirements).

Answer: Program admission requirements are consistent with the institution’s general admissions requirements.

2) Describe the process for evaluating exceptions to these requirements.

Answer: N/A

3) How will the institution encourage enrollment by persons from groups historically underrepresented in the discipline or occupation?

Answer: The program is designed to enhance participation by traditionally underrepresented groups. Creating opportunities for underserved communities to impact the food sector is a core rationale for the program. The college is comprised of a majority of students from minority background.

e. Academic Support Services

Summarize the academic support services available to help students succeed in the program.

Answer: The college has an active academic learning center to provide support and tutorials in all academic disciplines and in basic study skills.

f. Credit for Experience

If this program will grant substantial credit for learning derived from experience, describe the methods of evaluating the learning and the maximum number of credits allowed.

Answer: N/A
### g. Program Assessment and Improvement

Summarize the plan for periodic evaluation of the new program, including the use of data to inform program improvement.

**Answer:** The program will be subject to standard institutional assessment processes, including course assessment and academic program review on a periodic basis. Student surveys will also be implemented to complement the assessment process and inform program modifications.

### h. Transfer to Baccalaureate Programs

If the program will be promoted as preparing students for transfer to a baccalaureate program, provide a copy of an articulation agreement with at least one institution.

An articulation agreement has been concluded with Lehman College. (See Appendix G)

**Not Applicable:** ☐
Task 3 - Sample Program Schedule

NOTE: The sample program schedule is used to determine program eligibility for financial aid.

Guidance for this task can be found by clicking here: Department Expectations: Curriculum (including Internships, Financial Aid Considerations, and Liberal Arts and Sciences)

Relevant regulations for this task can be found by clicking here: Relevant Regulations for Task 3

a). Complete Table 1a (for undergraduate programs) or Table 1b (for graduate programs).
(See Appendix C)

b). If the program will be offered through a nontraditional schedule, provide a brief explanation of the schedule, including its impact on financial aid eligibility.
Answer:

c). As required under §52.2(c)(8), research or a comparable occupational or professional experience shall be a component of each master's degree program. This normally includes at least one of the following: passing a comprehensive test, writing a thesis based on independent research or completing an appropriate special project. Identify how this requirement is met, including course number if applicable.
Answer:

d). For existing courses that are a part of the major, enter the catalog description of the courses:
Answer: (See Appendix H)

e). Syllabi:
(See Appendix A)

For undergraduate programs, provide syllabi for all new courses in the major.
For graduate programs, provide syllabi for all new courses.

The expected components of a syllabus are listed in Department Expectations: Curriculum of the Guidance Document.

Note: Although it is required to submit syllabi for all new courses as noted, syllabi for all courses required for the proposed program should be available upon request.

Instructions for submitting syllabi:

All required syllabi must be included in a single, separate PDF document.
Abstract

Hostos Community College proposes an Associate’s Degree in Food Studies. The program is an interdisciplinary field of study that focuses on the importance of food and food policy as a complex political, economic, and social system. The field incorporates a variety of complex networks, ideologies, environments, consumers and industry sectors. Through the study of these interrelated systems, food studies uses multiple disciplines to examine social, environmental, political and public health issues in the local and global food system.

Food studies students will also gain familiarity with broader contexts: food systems, food movements, emerging issues in the food industry and jobs in the food sector. Through experience based partnerships and internships, students will develop skills necessary to both obtain employment in a related sector, and help improve the food environment in the Bronx and the greater New York City region.

The proposed program is designed to help students gain skills and experience needed to either transfer to Bachelor’s programs in related fields or get jobs in the industry. The Associate’s Degree program will be complimented by opportunities to participate in concurrent offerings in the College’s Workforce Development program.
Proposal Summary

Hostos Community College proposes an Associate in Science (A.S.) degree in Food Studies that consists of 60 credits, including required and flexible common core courses; Food Studies core courses and electives; a course in career practices; and a required internship. During their first year, students select a track in one of four areas: food policy, social issues, health and nutrition, or environment and sustainability. These tracks prepare graduates to transfer into four-year bachelor's programs in food and nutrition studies and related fields such as public health, community health, political science, urban studies, nutrition science, and environmental studies. These areas of study serve as the foundational academic preparation for an internship in a related sector.

The rationale for such a program is premised on the importance of the food sector to the socio-economic development of the region as documented by the NYC Economic Development Corporation and the need to develop personnel who are knowledgeable about food policy to address the following community and regional issues:

(1) The persistence of severe health disparities and limited access to healthy food alternatives in underserved communities in the New York City area and in the South Bronx in particular;

(2) The growth of public and private sector organizational efforts to collaborate in the development of community-based responses to food insecurity, healthy food access and food policy;

(3) The size and complexity of the food and health industry in New York City and its centrality to the regional economy;

(4) The existence of the Hunts Points Food Market, the largest food distribution center in North America in the immediate vicinity of the college community, and its economic importance to the community and its residents who comprise a majority of those attending the college; this proximity and association will provide practical and experiential opportunities for students to understand the regional food system.

(5) Labor market projections by federal, state and private sector analysts indicating that the food industry and its related sectors are growth areas of employment;

(6) The planned investment by New York City in the food distribution center in the Bronx, and the potential to transform the food industry and improve the health and economic prospects of the community;

(7) The interest of local private and public institutions in engaging with the college in developing food industry related workforce opportunities for area residents;
The initiative is consistent with College's institutional mission.

Food Studies at Hostos Community College incorporates a liberal arts approach to food education combined with a strong science foundation, providing students options for continued study through transfer into four-year baccalaureate programs. The program will provide transfer opportunities to Lehman College through a recently completed articulation agreement. Additional transfer options are under development, including potential collaborations with Hunter and the New School. The curriculum and all core courses are grounded in the concept of a food system, which includes food production and consumption, regulatory policies, social contexts, the environment, and public health. Using the South Bronx and New York City as contexts for learning, the program is designed to help students gain the knowledge and skills to obtain jobs and contribute positive change in their own communities.

During the first year of the program, students take two foundational Food Studies courses, *Food Studies I: Introduction to Food Studies* and *Food Studies II: Food, Environment, and Justice*, in addition to general education courses, electives and science courses, as appropriate.

In their second through fourth semesters, Food Studies students take four additional core courses: *Food Policy and Advocacy*, *Food, Health, and the Environment*, *Food Studies Career Practices*, and *Food Studies Capstone*, along with three electives in their chosen track plus one additional elective. During their final semester in the program, students complete a 10-hour per week internship at a business, non-profit, or government agency in the field.

Through strategic partnerships with senior colleges, community-based organizations, businesses, and government agencies, Food Studies at Hostos provides students opportunities to: understand social, political, environmental, and public health dimensions of urban, regional, and global food systems; identify innovative approaches to addressing inequity; gain first-hand experience working in non-profit, for-profit, or government sectors, leading to enhanced opportunities for job placement; graduate with the necessary knowledge and college-level credits to transfer to related baccalaureate degree programs and/or begin careers or employment in the rapidly growing food sector.

To this end, it integrates experiential learning opportunities into the curriculum through a required internship. This gives students opportunities to gain job skills and understand connections between classroom learning and work in the field.

With guidance from faculty and staff, students identify, apply for, and obtain an internship with a New York City organization, business, or government agency during the fall semester *Food Studies Career Practices* course. Students complete their 10-hour per week and one-credit internship while also enrolled in the spring semester *Food
Studies Capstone course.

The combined internship-capstone experience is designed to help students link course concepts to the employment sector at the same time that they gain professional experience in the field. The internship may also serve as an entry point into public or private sector jobs upon graduation.
I. Purpose and Goals

Context
Hostos Community College, part of the City University of New York (CUNY) system, aims to make higher education accessible, relevant, and affordable for students so they may gain meaningful employment immediately upon graduation and/or further their higher education leading them to occupations that require baccalaureate or higher degrees. The majority of the College’s student body is female (65.8%), over half (53.2%) is Hispanic and over a quarter (28.2%) is African American. The majority are also first generation college students, speak English as a second language, and often come from homes without an adult that has attained more than a high school degree. The College itself is situated in one of the lowest income congressional districts in the United States, and many of its students come from low-income backgrounds. Members of the surrounding community thus experience many of the food system challenges—including diminished access to fresh, healthy, affordable food, and diet-related health disparities—that grow out of systemic patterns of racialized poverty and lack of economic opportunity. These issues have gained national attention in recent years, and, due to their up-close familiarity, Hostos students will be uniquely poised to address these challenges, provided that they have access to relevant and high quality educational opportunities.

Hostos Community College (HCC), like its national community college counterparts, strives to be a stepping-stone to a better future for students who often experience significant socio-economic barriers to college persistence and success. However, Hostos’ mission is quite distinct from similar colleges: It was established in the South Bronx in 1968 in direct response to calls from Bronx residents who were routinely marginalized from higher educational opportunities and who organized to demand that a college be situated in their community. HCC maintains its commitment to serve as a community asset, and is therefore driven not only to create pathways to future academic and employment opportunities, but to also break down barriers to the realization of both student and community potential. This spirit weaves through the fabric of the College’s academic community, undergirds the school’s leadership, and animates this proposal to establish a unique, interdisciplinary academic program in Food Studies that, based on feedback from scholars in the field, has significant potential to serve as a national model.

The 2010 County Health Rankings report published by the University of Wisconsin Population Health Institute and the Robert Wood Johnson Foundation (2014)¹, notes that of the sixty two counties analyzed in the state, the Bronx came in last for both health factors (i.e., factors influencing health) and health outcomes (i.e., how healthy a county is). This place-based pattern is echoed by data in the New York City Department of Health and Mental Hygiene Community Health Profiles (2006)² where health morbidities and related mortalities were found to differ by borough and neighborhood. The rate of

obesity in New York City has doubled over the past twenty years, and increases in childhood obesity rates include more than 25% of Head Start children and high school students being classified as obese or overweight.\textsuperscript{3} And, of particular relevance to Hostos Community College were data on neighborhoods of Highbridge, Morrisania, Hunts Point, and Mott Haven (the College’s geographic community), where residents fared worse on critical health indicators than the rest of the Bronx and New York City as a whole, particularly in the rates of adult obesity (with one in four adults classified as obese) and diabetes (16%-17% of the adult population).

These obesity and related morbidities statistics correlate with shifts in New York City’s food environment, where price disparities between fresh produce and their processed counterparts have widened. According to a 2010 New York City food systems analysis conducted by the New York City Council, this price gap, coupled with lack of access to fresh food sources and outlets in neighborhoods like those surrounding Hostos Community College, actually encourage high caloric food consumption that can result in diet related diseases.\textsuperscript{4} Further aggravating this cycle is an increase in food insecurity, particularly among households with children. For these families, what is bought and served is based not only on food availability, but also cost. These barriers are most striking and ironic in the Bronx, where neighborhood “food deserts” exist alongside the Hunts Point Peninsula, New York City’s designated food distribution zone. Hunts Point includes, among other wholesale markets, the Hunts Point Produce Market—the largest fresh produce food distribution center in the world.

As noted above, Hostos Community College aims to remain an asset to the surrounding community through all of its programs. HCC has identified the proposed Food Studies program as an opportunity to actively participate in improving the South Bronx food environment, while providing students with educational opportunities that will help them succeed in subsequent academic and post-graduate careers. Hostos’ core strengths include:

\begin{itemize}
\item an enduring commitment to non-traditional students;
\item thriving signature programs (e.g., allied health, dual degree programs);
\item ambitious and dedicated students, faculty, and staff;
\item racial and ethnic diversity and multilingualism;
\item a history of community engagement;
\item a strong sense of community on campus;
\item geographic accessibility (for Bronx and Upper Manhattan residents);
\item a strong administrative capacity; and
\end{itemize}


• an ability to adapt, experiment, and innovate in response to changing circumstances.\textsuperscript{5}

The proposed program will draw upon these assets, and those of the surrounding community, to provide Hostos Community College students with a first-of-its kind degree program grounded in current thinking in the field.

Program Vision and Outcomes

The Food Studies program at Hostos Community College will help reframe the food sector and food studies landscape by placing the individuals historically disenfranchised by traditional planning and policy inequities at the very center of knowledge generation and practice. Through strategic partnerships with senior colleges and local community-based organizations, the Hostos Community College Food Studies Program will provide students opportunities to:

1. Understand and articulate complex dynamics of urban, regional, and global food systems, including their environmental, social, political, geographic, public health, and cultural dimensions;

2. Examine the socio-political dimensions of food access and security on a local, national, and global scale;

3. Identify social, organizational, policy, and economic innovations emerging in response to growing food system inequities in similar communities (locally, nationally, and globally); and

4. Gain first-hand knowledge and skills in food systems sectors (e.g., for profit; non-profit; local government) through field experiences and enriched internship programs, leading to enhanced opportunities for job placement and leadership in diverse sectors.

5. Graduate with the necessary skills, certifications, and curricular articulations to seamlessly transfer to related Baccalaureate degrees or begin a career in steady growth, well-paying jobs within the sector.

II. Needs and Justification

Trends in the interdisciplinary field of food studies

Over the past two decades, a growing awareness of environmental challenges, social inequities, and public health disparities in the food system has fueled increased interest in food studies among colleges and college students seeking to learn how to address these

\textsuperscript{5} Rooted in our Mission, Our Compass to the Future: The HCC Strategic Plan. 2011-2016.
problems through academic and post-graduate careers. Institutions of higher learning are adopting a leadership role to ensure that their students and campus communities are equipped with the necessary knowledge, skills, and experience to successfully lead a movement toward sustainable and equitable food systems.

Put simply, food studies is an interdisciplinary field that looks beyond the production and consumption of this most basic human need to situate food within its complex political, economic, and historical contexts. Clearly, America’s “food crisis” is one that encompasses a complex network of identities, ideologies, environments, consumers and industry. To address these interlocking systems, food studies uses multiple disciplines to examine social, environmental, political, and public health issues in the food system, and to explore how the social problems themselves are constructed and represented.

Nationally, many colleges and universities have designed and implemented food studies, in addition to interdisciplinary sustainable agriculture programs over the past twenty years. These include private, public, and land-grant institutions whose programs range in focus from nutrition to sustainable agriculture; from community development to cultural studies of food. A number of universities in New York City offer programs in food studies (e.g., New York University; The New School) as well as related fields including nutrition and health (e.g., Lehman and Hunter College). Throughout the United States, student groups have also addressed aspects of the food system through such initiatives as composting projects, college gardens and farms, and campus procurement campaigns, and in many cases, these initiatives have coincided with curricular activities and classroom learning. Indeed, a review of food and sustainable agriculture pedagogies found that participatory and experiential learning are a common elements of food studies programs, along with teaching practices that emphasize systems thinking and analysis; service learning and civic engagement; recognition of students and faculty as co-learners; and a focus on intersections of food movements with food systems scholarship.

**Need for a Food Studies Associates Degree Program**

Despite the rise in food studies programs, most of the liberal arts-oriented programs are offered at four-year institutions. A 2013 report found that there are few opportunities for community college students to study food systems through curricular and co-curricular activities, and, among the handful of community college food-related programs that do exist, most are focused on hands-on skills: culinary arts, technical training (e.g., food safety), horticulture, or farming. In New York City, Kingsborough Community College

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8 The Association for the Advancement of Sustainability in Higher Education; The Sustainable Agriculture Education Association; and the Association of Collegiate Schools of Planning.
10 ibid.
in Brooklyn offers an Associate of Applied Science degree in Culinary Arts, as well as certificate programs in Culinary Arts and Food Management and in Urban Food System Greening. LaGuardia Community College in Queens prepares its students to become registered Dietetic Technicians. There are currently no community colleges that offer food-related training in the Bronx, and, in keeping with the national trend, no community colleges in the city or tri-state region that offer Associates Degrees in food studies. This is a significant gap.

Given the limited number of opportunities for community college students to study food in degree programs as a whole, as well as the relatively narrow focus of community college programs that do exist, Hostos Community College (HCC) has a significant opportunity to be an innovator in this growing field. Hostos’ unique location, its student population, and its commitment to serving the surrounding community make it an ideal institution to build one of the first Food Studies Associate’s Degree programs in the United States, providing a model for similar institutions, nation-wide.

**Key Elements of the Food Studies Program at Hostos**

The program is distinctive among community college degree programs in that:

- It is one of the only food studies programs at a community college in the U.S. that takes a liberal arts approach (contrasted with training programs at other colleges) providing transfer opportunities to related senior college programs in food policy, health, nutrition science and environmental studies
- Its core courses are interdisciplinary, reflecting the national trend in four-year food studies curricula
- Integrates experiential learning opportunities into the degree program
- Is tailored for a student body that experiences some of the food systems challenges (e.g., food inaccessibility/unaffordability; diet-related health issues) often examined in food studies programs
- Emphasizes connections between food systems concepts and on-the-ground issues impacting the South Bronx community

**Relevance for Employment**

Alongside growth in the academic field of food studies, demand for graduates with knowledge about the complexity of the food system is also on the rise. In 2013-14 the college commissioned a report on the food sector that found employers in the food industry and in government agencies were apt to hire candidates with a number of key skills and experiences, including:

- verbal and written communication (including bilingual communication)
- research skills
- computer literacy
- problem solving
• organizational skills
• team-work and relationship-building
• experience in relevant fields
• integrated knowledge base of the food system (e.g., layering business expertise with understanding of sustainability; nutrition with culinary skills)\(^\text{11}\)

The report, by Karp Resources, a firm specialized in the sector noted that changes in the food system are driving changes in the employment sector, and found that jobs in health/wellness and food operations (including warehousing, distribution, logistics, supply chain management, sourcing, sales and marketing) are expected to grow significantly over the next five- to ten years.\(^\text{12}\) While changes in food safety regulations ushered in by the Food Safety Modernization Act of 2011 and related management systems including Hazard Analysis and Critical Control Points (HACCP) will require specific certifications obtained through one- to multi-day training programs, Associate's or Bachelor's degrees will be required for many of the jobs in this growth field. And, even in those fields in which a post-secondary degree is not currently required, employees with these credentials are expected to obtain higher salaries in entry-level positions. These labor trends are confirmed by projected data trends from the U.S Department of Labor, Bureau of Labor Statistics and discussed in the subsequent section.

Meanwhile, food industry employers also seek candidates with working knowledge of food policy and regulations. Since these will change over time, graduates will need to understand not only current the current policy landscape, but also how policy making occurs and how to discern the impact of future policies and regulations on various aspects of the food system. This requires critical thinking and analytical skills, in addition to familiarity with current policies, which students can develop through a combination of course work, faculty guidance, and experiential learning. (Appendix I, food sector employer interviews).

In New York City, most occupations, including food-related jobs, are expected to grow.\(^\text{13}\) The largest volume of jobs will be in foodservice, but this sector will show mixed growth, and usually lower wages, which is again no surprise, given that food service jobs are among the lowest paying, nationwide.\(^\text{14}\) A report from the NYC Food Policy Center at Hunter College called on city government to partner with employers, labor unions, and educational institutions to produce 10,000 “Good Food Jobs” (defined as jobs that pay a living wage, offer safe working conditions, promote sustainable economic development, and make healthier food more accessible to all) by 2020.\(^\text{15}\) Recommendations to help expand this sector include creating/expanding regional and urban food production and

\(^{11}\) Karp Resources, 2013. Hostos Community College Final presentation: Phase I.
\(^{12}\) ibid
\(^{13}\) Karp Resources, 2013. Hostos Community College Final presentation: Phase I.
\(^{14}\) Jayaraman, S. (2012). The Hands that Feed Us: Challenges and Opportunities for Workers Along the Food Chain.
\(^{15}\) Jobs for a Healthier Diet and a Stronger Economy: Opportunities for Creating New Good Food Jobs in New York City. NYC Food Policy Center at Hunter College and the New York School of Public Health.
distribution hubs; supporting new and existing small grocery stores and supermarkets in order to increase food access; improving opportunities for microenterprises (e.g., value-added products; street carts); and assisting institutional food programs (e.g., schools) to train and hire more skilled food workers.\textsuperscript{16}

The Hostos Community College Food Associate’s Degree program will thus provide students with workplace skills (e.g., communication, computer literacy, problem-solving) and cross-sectional familiarity with food systems policies, as deemed necessary by employers in the food sector. And, it will give graduates the credentials to gain higher paid employment in the existing food sector. Food studies students will also gain familiarity with broader contexts: food systems, food movements, and jobs in the food sector, along with skills and confidence necessary to both obtain employment in, and lead the way toward new jobs that help improve the food environment in the South Bronx and beyond.

The proposed program is designed to help students gain skills and experience needed to either transfer to Bachelor’s programs in related fields or get jobs/lead the industry. The Associate’s Degree program will be complimented by concurrent initiatives in the College’s Workforce Development program, and additional certificate and/or degree programs. By integrating critical and conceptual learning about food systems with experiential learning, the Food Studies program at Hostos will support students in developing the academic and “real-world” skills to lead the way toward more equitable and sustainable food systems.

Labor Market Trends and Related Occupations

The food and food related sectors are projected to grow both at the national and local levels. Individuals trained in food and nutrition may be employed in a variety of capacities. They advise people on what to eat in order to lead a healthy lifestyle or achieve a specific health-related goal. They may advise wholesalers or retailers on promoting healthy choices, and they may provide community education in support of health and wellness interventions. \textit{Community food and nutrition workers} develop programs and counsel the public on topics related to food and nutrition. They often work with specific groups of people, such as adolescents or the elderly. They work in public health clinics, government and nonprofit agencies, health maintenance organizations (HMOs), and other settings. Employment is projected to grow 21 percent from 2012 to 2022, faster than the average for all occupations.\textsuperscript{17} The role of food in preventing and treating illnesses, such as diabetes, is now well known. Trained personnel will be needed to support care for patients with various medical conditions, improve information about food and food access and advise people who want to improve their overall health.

\textsuperscript{16} ibid.

Health educators teach people about behaviors and informed choices that promote wellness. Health educators and community health workers work in a variety of settings, including hospitals, nonprofit organizations, government, private businesses, and colleges. They develop and implement strategies to improve the health of individuals and communities. Community health workers collect data and discuss health concerns with members of specific populations or communities. A major thrust of the Affordable Care Act is to enhance clinical interventions with community-based health and wellness education strategies. Given the documented health disparities related to food access in underserved communities, community-based health education strategies will be an important component in achieving improved outcomes. Employment of health educators and community health workers is projected to grow 21 percent from 2012 to 2022, faster than the average for all occupations. Growth will be driven by efforts to improve health outcomes and to reduce healthcare costs by teaching people about healthy food choices and behaviors, and utilization of available health care services.\(^\text{18}\)

Recent changes to federal regulation and food-related policies will increase the need for food technicians. Food technicians may work for the federal government, monitor regulatory compliance as required by the Food and Drug Administration (FDA), the Department of Agriculture, the food industry and local agencies that monitor food sourcing and safety. With the recent passage of the FDA Food Safety Modernization Act (FSMA), the frequency of food inspections is expected to increase, along with improvements in performance standards. The FSMA also requires more inspections of foreign food production facilities that export to the United States, thus some food technicians may travel internationally and language skills will be an asset. Industry demand is anticipated as it seeks to institutionalize internal processes to ensure compliance with the FSMA policies. Job growth for food technologists is expected to be driven by the demand for new food products and food safety measures. Food regulation and compliance policies are expected to increase because the public is more aware of nutrition, health, food safety. Employment of food technicians is projected to grow 9 percent from 2012 to 2022, about as fast as the average for all occupations.\(^\text{19}\)

Opportunities for advancement increase significantly for those who complete the baccalaureate degree.

Environmental technicians are increasingly in demand, particularly in the public sector. In state and local government agencies, environmental protection technicians are employed to inspect businesses and public places, and investigate complaints related to food safety, food sourcing, air quality, and water quality. They may be involved with the enforcement of environmental regulations. They may protect the environment and contribute to the public’s health by performing environmental evaluations of new proposed construction sites or by evaluating the environmental health of sites that may contaminate a community’s supply of food, water and other variables that impact public

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health and the environment. Employment of environmental protection technicians is projected to grow 19 percent from 2012 to 2022, faster than the average for all occupations. Environmental protection workers should have good job prospects overall.\textsuperscript{20}

New York City Food Related Labor Market

The main drivers impacting the food sector in New York City include: sustainability, food safety, demographic shifts, chronic disease management, local tourism, supply chain expansion, zoning and other economic development initiatives. Food related needs in the NYC food industry vary by sector. Food services is the largest and fastest growing food sector in New York City. Food retail employment is somewhat more proportionate to population by borough. Food retail and wholesale employment has grown over the decade. New York City food sector needs include food safety specialists, environmental compliance monitors (OSHA), and food and nutrition specialists.\textsuperscript{21} The food related components of the health industry and the education sector are another large source of demand for persons trained in food, nutrition and health.

The wholesale distribution system will be a particularly active economic engine in the City and the Bronx. The largest wholesale food distribution center in North America is targeted for expansion and re-development, part of the City’s plan to revitalize the regional economy by investing in a sector that is growing and whose continued success is essential to the City’s economic future. Mayor Bill de Blasio recently announced that the city will invest $150 million over the next 12 years to revitalize the Hunts Point food distribution center in the South Bronx. The investment would modernize the crucial food market and add more jobs at the market, which employs more than 8,000 people. The plan would increase employment at all levels and develop the capacity to increase access to locally grown and produced food and create incentives for the establishment of retailers in underserved communities accustomed to limited choices for healthy food.\textsuperscript{22}

The Hunts Point Redevelopment Project will increase storage capacity at the city’s largest food hub, improve rail infrastructure and internal traffic circulation, ensure compliance with current food safety standards and regulations, and increase environmental sustainability of the facility.\textsuperscript{23} It will encourage the development of food related businesses, promote the development of retail businesses in the neighborhood, and foster local cooperation between food sector and local health and arts organizations. Uniquely situated in the hub of the proposed expansion, Hostos will participate in collaboration with the Economic Development Corporation and other community based agencies in determining workforce needs and incorporate additional complementary training opportunities through the degree related internship program and through its


\textsuperscript{21} NYCLMIS *Analysis of New York State Department of Labor, Quarterly Census of Employment and Wages New York City* (2014)

\textsuperscript{22} http://observer.com/2015/03/bill-de-blasio-announces-150-million-investment-in-bronx-produce-market/#izzz3271Ce6EX

workforce division. These collaborations were recently highlighted in the New York Times ("College in the Bronx to Offer Food Studies") as a unique feature of the proposed program. The article discussed how the initiative would respond to the critical social disparities in the community and create academic and workforce opportunities for students.

III. Student Interest and Expected Enrollment

As the food system continues to garner attention from academic institutions, policy makers, and the public at-large, there is also growing interest among Hostos students in learning about the connections between food, policy, health, and social justice. Surveys conducted at Hostos Community College in 2013 and 2014 found that students in two courses (Biology and English) were interested in learning about food justice and food access, food policy, sustainability/ how food impacts the environment, and the connections between nutrition and health. There was also interest in experiential learning opportunities, including field trips, hands-on culinary work, and working in urban farms or community gardens. Though these responses were drawn from a small sample size, they reflect the national trends noted above in that they align with salient food systems issues and movements, and suggest a need for co-curricular, experiential learning.

Student participation in a service learning project that involved establishment of a farmers market on the College campus in Fall 2013 was an additional indication of student interest in studying and engaging with the food system. In Dr. Elyse Zucker’s Expository Writing course, which centered on the theme of agriculture and food justice, students engaged in service learning by educating both the Hostos community and local residents about food production and the benefits of farmers markets. As part of this initiative, students promoted and ran The Hostos Garden Market farmers’ market. Faculty and students from the counseling, business and natural sciences divisions of the college helped this English class run the HGM, which is scheduled to open again in the 2014-15 academic year, and will continue to provide a service learning venue. This initiative exemplifies the types of experiential learning opportunities that will attract students from multiple disciplines to the Food Studies program.

The Food Studies curriculum thus reflects attention to the interests expressed in the preliminary surveys and through participation in a pilot service learning project, in addition to the identified need to provide students with an interdisciplinary major that is on par with programs at four-year institutions, nationally. It is anticipated that existing interest among students will translate into enrollment in the program beginning as early as Fall 2014 when Food Studies I, the first semester core course, will be offered. Food Studies I has been designed to meet the Individual and Society area of the Flexible Common Core standards in order to introduce and attract additional students to the Food Studies program. Beginning with an estimated 50 students upon launch of the degree

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program, it is expected that the program will see steady growth during the first five years. Expected enrollment of full-time and part-time students is summarized in figure 1.

Figure 1: Anticipated Enrollment

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IV. Curriculum

A. Overview

The goal of the program is to provide students with an integrated sequence of foundation courses in food policy and related health, nutrition, environmental and science disciplines to enhance transfer and employment opportunities upon degree completion. The food studies program is designed to provide a clear path to graduation that gives students necessary grounding in general education through the Common Core, a suite of suggested Flexible Common Core courses that meet CUNY requirements, and six core Food Studies courses designed specifically for the major. (Syllabi are attached.)

During the first year of the program, students take two foundational Food Studies courses, *Food Studies I* (Introduction to Food Studies) and *Food Studies II* (Food and the Environment), in addition to general education courses, as listed in Table 1a, “Undergraduate Program Schedule” (attached).

At the end of the first semester, Food Studies students choose one of four focus areas (tracks): *Food Policy; Social Issues; Health and Nutrition; Environment and Sustainability*. These tracks have been designed to prepare students to transfer into related 4-year degree programs in areas including political science (food policy track); urban/social studies (social issues track); health and nutrition (health and nutrition track); and environmental studies (environment and sustainability track).

During their second year Food Studies students take four additional core courses: *Food, Health, and the Environment*; and *Food Policy and Advocacy; Food Studies Career Practices; and Food Studies Capstone*, along with three courses from a select group of courses in their chosen track, and a free elective that fills the Flexible Common Core requirement. Between 3 and 4 credits (i.e., 1 course) is allotted to either remediation courses or free electives of choice that students take over the two-year program, as appropriate.

During their final semester Food Studies students also complete a 10-hour per week internship at business, non-profit, or government agency in the field. The internship is completed at the same time that students are enrolled in the *Food Studies Capstone*, which helps them draw connections between curricular and experiential learning. The internship may also serve as an entry point into a food sector job upon graduation.

Internships are coordinated by the College’s Division of Continuing Education and Workforce Development, in collaboration with Food Studies faculty and the Center for Bronx Non-Profits (which is housed at Hostos), as appropriate. Articulation agreements with two senior colleges, Lehman College and Syracuse University, are in process, and will provide opportunities for students to transition seamlessly into a 4-year degree program, if desired.

B. Food Studies Program Requirements
This section outlines the required and recommended courses that Food Studies students take throughout the two-year degree program. The total number of credits for the program is 60. A sample schedule is attached (Table 1a).

A. General Education/ Common Core

1. Required Common Core (4 courses)

   a) English Composition (2 courses)

   - *Expository Writing* (English 110, 3 credits). Pre-requisite: Passing CUNY/ACT Reading and Writing tests, or Exemption

   - *Literature and Composition* (English 111, 3 credits) Pre-requisite: ENG 110 or Department permission.

   b) Mathematical and Quantitative Reasoning (1 course)

   - *Introduction to Probability and Statistics* (MAT 120, 3 credits) Pre-requisite: Passing score on the COMPASS / CMAT or passing MAT 20. Pre/Co-requisite: ESL 35

   c) Life and Physical Sciences (1 course)

   - *General Biology I* (BIO 210, 4 credits) Pre-requisites: ESL 91 or ENG 91; MAT 20 or Exempt

   OR

   - *Principles of Biology* (BIO 110/111, 4 credits) Pre/co-requisites if taught in English: MAT 10; ENG 91 or ESL 91. Pre/co-requisites if taught in Spanish: SPA 222

2. Flexible Common Core (6 courses)

   Student choose from among the following courses in each of the Flexible Common Core categories.

   a) World Cultures and Global Issues (1 course)

   - *Introduction to Anthropology* (ANTH 101, 3 credits) Pre-requisite: None
   - *Introduction to Black Studies* (BLS 101, 3 credits) Pre/Co-requisite: ENG 110
   - *Latin American Literature in Translation* (ENG 222, 3 credits) Pre/Co-requisite: ENG 111 or permission
   - *World History to 1500* (HIS 201, 3 credits) Pre-requisite: ENG 110
- Modern World History (HIS 202, 3 credits) Pre-requisite: ENG 110
- History of the Caribbean (LAC 108, 3 credits) Pre-requisite: ESL 91 or ENG 91 or higher when offered in English; SPA 121 when offered in Spanish
- Caribbean Society & Culture (LAC 118) Pre-requisite: ESL 91 or ENG 91 when offered in English; or SPA 121 or higher when offered in Spanish
- Spanish for English Dominant Hispanics I (SPA 117, 3 credits) Pre-requisite: by placement
- Spanish for English Dominant Hispanics II (SPA 118, 3 credits) Pre-requisite: SPA 117 or by placement
- Politics of Latin America (POL 207, 3 credits)
- Gender and Work (WGS 200, 3 credits)

b) U.S. Experience in Its Diversity (1 course)
- The African-American Experience (BLS 114, 3 credits)
- United States History: Through the Civil War (HIS 210, 3 credits) Pre-requisite: ENG 110
- The Latino Experience in the United States (LAC 101, 3 credits) Pre-requisites: ENG 91 and SPA 121 when taught in Spanish
- Hispanic Migration to the United States (LAC 132, 3 credits) Pre-requisite: ESL 91 or ENG 91 or higher when offered in English; SPA 121 or higher when offered in Spanish
- American Government (POL 101, 3 credits)
- Women’s and Gender Studies (WGS 100, 3 credits) Pre-requisite: ENG 110
- United States History: Reconstruction to the Present (HIS 211, 3 credits)

c) Creative Expression (1 course)
- Creative Writing Workshop (ENG 203, 3 credits). Pre-requisite: ENG 111
- Creative Non Fiction: Autobiography and Memoir (ENG 204, 3 credits) Pre-requisite: ENG 111
- Introduction to Children’s Literature (ENG 221, 3 credits). Pre-requisite: ENG 111 or Department permission
- Modern Art in the City (VPA 114, 3 credits) Pre/Co-requisite: ENG 91 or ESL 91 or above
- Fundamentals of Public Speaking (VPA 19, 3 credits) Pre-requisite: ESL 35 or ESL 86. Co-requisite: ENG 91 or ESL 91

d) Individual and Society (1 course)
- Women in Literature (ENG 223 / WGS 223, 3 credits) Pre-requisite: ENG 111 or permission
- Literature & Illness (ENG 228, 3 credits) Pre-requisite: ENG 111 or permission
- Language, Culture & Society (ENG 230, 3 credits)
- Bilingualism (LIN 102, 3 credits) Prerequisite: ESL 35 or higher
- General Psychology (PSY 101, 3 credits)
- American Government (POL 101, 3 credits)
- Life-Span Development of Behavior (PSY 110, 3 credits) Pre-requisite: PSY 101 or equivalent or permission of instructor. Co-requisite: ENG 110
- Introduction to Social Sciences (SSC 101, 3 credits)

e) Scientific World (1 course)

- Botany of Food (new course in 2014/15); This course is recommended for Food Studies students. (BIO 250, 4 credits), Pre-requisite: BIO 210 or BIO 120/121
- Plants and Society (BIO 120, 4 credits, 3-hrs. lecture, 2 hrs. lab). Pre-requisite: BIO 110
- Organismic Biology (BIO 130, 4 credits, 3-hrs lecture, 3 hrs lab). Pre-requisite: BIO 110
- General Biology I (BIO 210, 4 credits, 3-hrs lecture/3 hrs lab 1 hr recitation). Pre-requisites: ESL 91 or ENG 91; MAT 20 or Exempt
- (BIO 220, 4 credits, 3-hrs. lecture/3 hrs. lab /1hr. recitation). Pre-requisite: BIO 210
- Anatomy & Physiology I (BIO 230, 4 credits, 3-hrs. lecture/3-hrs. lab). Co-requisites: ENG 91, ESL 91 or ESL 35; MAT 20
- Anatomy & Physiology II (BIO 240, 4 credits, 3-hrs. lecture/3-hrs. lab). Pre-requisite: BIO 230
- Introduction to Genetics (BIO 260, 4 credits; 2 hrs. lecture/ 4 hrs. lab). Pre-requisite: BIO 220. Co-requisite: MAT 160
- Microbiology (BIO 310 4 credits, 3-hrs. lecture/3-hrs. lab). Pre-requisite: BIO 220 or 240
- General Chemistry I (CHE 210, 4 credits, 3-hrs. lecture/3 hrs. lab/1-hrs. recitation workshop). Pre-requisite: MAT 30. Co-requisite: MAT 160
- General Chemistry II (CHE 220, 4 credits, 3-hrs. lecture/3-hrs. lab/1-hrs. recitation workshop). Pre-requisite: CHE 210
- Organic Chemistry I (CHE 310, 3 credits, 3-hrs. lecture/1-hr. recitation). Pre-requisites: CHE 220
- Organic Chemistry I Lab (CHE 312, 2 credits, 4 hours lab) Pre/Co-requisite: CHE 310
- Pre-calculus (MAT 160, 4 credits, 4.5 hours). Pre-requisite: MAT 30 or initial placement on COMPASS / CMAT Test (M1, M2, M3, & M4)
- Calculus I (MAT 210, 4 credits, 6 hours)Pre-requisite: MAT 160 or by placement. Pre/Co-requisite: ESL 35
- Calculus III (MAT 310, 4 credits, 4 hours). Pre-requisite: MAT 220. Pre/Co-requisite: ESL 35
- Physics I (PHY 110, 4 credits, 3-hrs. lecture/ 3-hrs lab /1hr recitation) Pre-requisite: MAT 2. Co-requisite: MAT 30
- Physics II (PHY 120, 4 credits, 3-hrs. lecture/ 3 hrs lab 1-hr, recitation.) Pre-requisites: PHY 110
• General Physics I (PHY 210, 4 credits, 3-hrs. lecture/2-hrs. lab/2-hrs. recitation). Pre/co-requisite: MAT 220

f) One additional course taken from one of the above areas as a free elective. Students who intend to complete the Environment & Sustainability track should complete an additional science course from the flexible core elective.

B. Food Studies Core Courses and Track-Specific Electives

1) Core Courses

Note: These are new courses.

• FS 101 Food Studies I: Introduction to Food Systems (3 credits, Pre-requisites: ENG 091; ENG 092; Co-requisite: ENG 110)
• FS 120 Food Studies II: Food, Environment and Justice (3 credits; Pre-requisites FS I; BIO 210)
• FS 200 Food, Policy, and Advocacy (3 credits; Pre-requisites FS I; FS II)
• FS 220 Food, Health, and Environment (3 credits; Pre-requisites FS I; FS II)
• FS 225 Food Studies Career Practices (1 credit; Pre/co-requisite: All Food Studies core courses)
• FS 230 Food Studies Capstone (3 credits; Pre/co-requisite: All Food Studies core courses)

Students will also complete a one-credit Food Studies Internship during their final semester in the program.

2) Track-Specific Electives

Food Studies majors will select three track-specific courses in an area of choice.

a) Food Policy track (3 courses)

• Intro to Social Sciences (SSC 101, 3 credits). Pre-requisite: None
• Fundamentals of Public Administration, (PPA 101)
• State and Local Government (PPA 110, 3 credits) Pre-requisite: PPA 101, Fundamentals of Public Administration
• American Government (POL 101, 3 credits) Pre-requisite: None
• Health and Welfare Administration (PPA 122, 3 credits) Pre-requisite: PPA 101, Fundamentals of Public Administration
• Diversity and Pluralism in America (BLS 119, 3 credits) Pre-requisite: None Co-requisite: SPA 121 or ENG 91
- *The Latino Experience in the US* (LAC 101, 3 credits) Pre-requisites: ENG 91 and SPA 121 when taught in Spanish
- *Hispanic Migration to the US* (LAC 132, 3 credits) Pre-requisite: ESL 91 or ENG 91 or higher when offered in English; SPA 121 or higher when offered in Spanish
- *Unions and Labor* (PPA 120, 3 credits) Pre-requisite: PPA 101, Fundamentals of Public Administration

**b) Social Issues track (3 courses)**
- *Intro to Social Sciences* (SSC 101, 3 credits) Pre-requisite: None
- *Intro to Sociology* (SOC 101, 3 credits) Pre-requisite: None
- *Sociology of Social Problems* (SOC 105, 3 credits) Pre-requisite: Any social science introductory course (except PSY 101)
- *Race and Ethnicity* (SOC 140, 3 credits) Pre-requisite: None
- *Diversity and Pluralism in America* (BLS 119, 3 credits) Pre-requisite: None. Co-requisite: SPA 121 or ENG 91
- *Social Problems of Minority Communities* (BLS 120, 3 credits) Pre-requisite: None
- *Ethnicity, Health, and Illness* (BLS 150, 3 credits) Pre-requisite: ESL 91
- Fundamentals of Public Administration, (PPA 101)
- *Unions and Labor* (PPA 120, 3 credits) Pre-requisite: PPA 101, Fundamentals of Public Administration

**c) Health and Nutrition track (3 courses)**
- *Introduction to Community Health Education* (HLT 110, 3 credits) Pre/Co-requisite: ENG 91 or ESL 91 when offered in English; SPA 121 when offered in Spanish
- *Nutrition* (HLT 215, 3 credits) Pre/Co-requisite: ENG 110
- *Contemporary Health Issues* (HLT 220, 3 credits); Pre-requisite: HLT 110
- *Ethnicity, Health, and Illness* (BLS 150, 3 credits); Pre-requisite: ESL 91

**d) Environment and Sustainability track (3 courses)**
- *Environmental Science I* (ENV 110, 4 credits); Pre-requisite: None
- *Environmental Science II* (ENV 120, 4 credits); Pre-requisite: ENV 110, ENV 111
- *ENV Lab I* (ENV 111)
- *ENV Lab II* (ENV 122)
- *Genetics 290*
- *The Botany of Food* (New Course) (BIO 250, 4 credits), Pre-requisite: BIO 210 or BIO 120/121
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<td>Food Studies Career Practices</td>
<td>FS 225</td>
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<td>FS 230</td>
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Select **one** Track and complete three (9-12 credits) Track Electives
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<td>State and Local Government</td>
<td>PPA 110</td>
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<td>American Government</td>
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<td>Hispanic Migration to the US</td>
<td>LAC 132*</td>
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<td>Unions &amp; Labor</td>
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<td>Diversity &amp; Pluralism in America</td>
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<td>Ethnicity, Health and Illness</td>
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<td>Public Administration</td>
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<tr>
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<td>PPA 120</td>
<td>3</td>
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| C. Health & Nutrition                  |                  |                  |
| Introduction to Community              |                  |                  |
| Health                                 | HLT 110          | 3                |
| Nutrition                              | HLT 215          | 3                |
| Contemporary Health Issues             | HLT 220          | 3                |
| Ethnicity, Health and Illness          | BLS 150*         | 3                |
| Public Administration                  | PPA 122          | 3                |

| D. Environment & Sustainability        |                  |                  |
| Environmental Science I                | ENV 110*         | 3                |
| Environmental Science II               | ENV 120          | 3                |
| Genetics                               | BIO 290*         | 4                |
| Botany of Food                         | BIO 250          | 4                |
| Food Microbiology                      | BIO 270*         | 4                |
| ENV Lab                                | ENV 111          | 1                |
| ENV Lab                                | ENV 122          | 1                |

| Subtotal Common Core and Major Courses | 55               |                  |
| Electives                              | 0-5              |                  |
| Total Degree Credits                   | 60               |                  |

**Program Tracks and the Common Core Requirements**

The program tracks are designed to provide students with a concentration in one of four food-related area studies. The tracks provide options for senior level baccalaureate studies in complementary fields (e.g., Nutrition Science, Community Health, Policy Studies or Public Health) as well as enhanced preparation for experienced-based internships and potential workforce opportunities. As the program develops and student interest is surveyed, we anticipate additional course offerings for the academic tracks. A number of current offerings (as well as anticipated future offerings) may satisfy both a
track requirement and a common core requirement (e.g., Sociology or Hispanic
Migrations to the US). In those instances where courses satisfy both a common core
category and a track elective, students will have additional elective credits available.
Students may use the additional credits to complete electives of interest. The
configuration will provide students flexibility to ensure an efficient distribution of credits.

V. Cost Assessment

Acceptable facilities including state-of-the-art classrooms already exist at Hostos
Community College. When the major courses are offered new library acquisitions will be
needed to support the program and will be purchased with funds allocated from
significant external grant funding. Most of the program development costs associated
with the program's implementation will be funded through foundation grants for next 2-3
years. In addition, the federal government recently approved grant funding to support the
expansion of the science and student engagement component of the proposed program.

See Appendix F

Faculty and Staff

Current Hostos Community College faculty teach the courses that represent the general
education portion of the curriculum and are qualified to teach a substantial portions of the
core courses and the new science curriculum required for the proposed program. Faculty
will be drawn from multiple departments to ensure the requisite interdisciplinary
perspective and support for collaborative teaching and learning. One new faculty is
anticipated to be hired to teach in the program and to provide coordination. Faculty
involved in the program have significant academic expertise in the various food related
disciplines, including plant and agricultural science, environmental science, geography,
public health, environmental psychology and food, microbiology, public policy and food
and nutrition. (Faculty CVs are available upon request.)
A part-time staff person will be hired to provide administrative support. A second staff
person will be hired to oversee the service learning and internship components of the
proposed program. These positions will be supported by external funding for 2 years.

See Appendix D

VI. Evaluation

The Food Studies Capstone has been designed to help the College evaluate student
success through the integration of program competencies. Additional indicators include
academic outcomes resulting in degree completion, transfer and career opportunities.
The process will involve course level as well as program related reviews, retention,
completion rates and graduation. The assessment results will inform changes in the
program as it evolves to meet student's academic needs. The proposed program will be
monitored both internally and externally. An advisory board will be constituted to
provide guidance on program related trends. Annual advisory board meetings, with
outside agencies, and industry partners will provide input as to overall program responsiveness to emerging field related needs and requirements. Placement sites will also provide feedback on new curricular requirements. Graduates of the program will be asked to complete an exit survey, and students will be asked to complete an ongoing survey upon completion of the major course sequence.

---

*Students may complete the Associates in Arts with a Food Studies concentration by completing the 16 credit sequence under the elective option of the degree.*
APPENDICES
Appendix A

Course Syllabi/Descriptions for required courses

Additional required courses

Core Requirements:

Distributions course (consisting of the following common core categories)

Electives

Appendix B

Program Requirements: Courses required for the AS in Food Systems

Appendix C

Sample program schedule for each academic track (Food Policy, Social Issues, Health & Nutrition, and Environment & Sustainability)

Appendix D

Faculty teaching assignment

Hostos full time faculty profile

Hostos part time faculty profile

Appendix E

Faculty to be hired

Appendix F

Budget tables – Hostos CC

(New Resources Table)

(Projected Revenue Table)

5 year revenue projection for the program

(Community College Worksheet)

Projected 5 year budget needs for the FS program
Appendix G

Articulation Agreement

Appendix H

Catalog course descriptions for existing courses

Appendix I

Food/policy/health industry representatives interviewed who informed the development of the curriculum.
Appendix A
FS 101 Introduction to Food Systems

3 Credits

Prerequisites: ENG 091; ENG 092
Co-requisites: Composition 110

Faculty Information - TBD

Course Description

This course provides students with fundamental knowledge of the food system and all of its components (e.g., agricultural production, consumption, regional linkages, food and agricultural policies). The course begins with an overview of food systems and the field of food studies and progresses through in-depth examination of the food system from a social science lens and a social justice framework. It also examines alternative food movements and includes examples of community groups working to improve the food system in New York City. The final sessions of this course are dedicated to discussions about employment in the food sector and academic fields of study that address aspects of the food system. The course includes field trips and/or guest lectures to complement readings, assignments, and in-class discussions.

Course Meetings - TBD

Course Books


Additional Required Course Materials

Additional readings will be provided via Blackboard.
Student Learning Outcomes

Over the course of the semester students will:

- Develop understandings of the food system and all of its components.
- Become familiar with the interdisciplinary field of food studies and the importance of a systems approach in studying food and the food system.
- Develop critical awareness of food systems issues in New York City and beyond.
- Develop basic understanding of social science and geographic methods used to analyze food systems information.
- Become familiar with social movements addressing social justice in the food system, and examples of these in New York City.
- Learn about opportunities to continue food studies education at Hostos Community College and select four-year institutions.
- Learn about jobs and entrepreneurship in the food sector.
- Develop critical thinking, writing, and public communication skills through group and individual work.

The reading and written assignments will also ensure that students in this course will satisfy the following Flexible Core learning outcomes:

- Gather, interpret, and assess information about the food system from a variety of sources and points of view.
- Evaluate evidence and arguments critically and analytically using basic social science methods.
- Produce well-reasoned written and oral arguments about food systems issues, using evidence to support conclusions.

In line with Flexible Common Core guidelines – Individual and Society area, students will:

- Identify and apply the fundamental concepts and methods of the evolving interdisciplinary field of food studies, drawing from fields of sociology, geography, environmental justice, and political science to explore the relationship between the individual and society.
- Examine how an individual's place in the food system affects experiences and choices.
- Articulate ethical uses of data and other information resources to respond to problems and questions related to the food system.
- Identify and engage with local, national, and global trends and ideologies in the food system, and analyze their impact on individual or collective decision-making.
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<table>
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<th>Percent of course grade</th>
<th>Due</th>
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<td>5%</td>
<td>Week 3</td>
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<td>15%</td>
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<tr>
<td>Final presentation</td>
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<td>Participation, including</td>
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- Access to the Internet
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1. Use Blackboard and keep Hostos email accounts active.
2. Keep Hostos email accounts accessible for new mail. Check and empty email daily.
3. Communicate with faculty using their Hostos email.
4. Come to class on time.
5. Perform all lesson objectives, activities and reading assignments.
6. Complete and hand in all written assignments on or before their due date.
7. Demonstrate proficiency with all homework and written assignments.
8. Demonstrate increased critical thinking and analytical skills.

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1. All classes are mandatory.
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**Tutorial and Counseling Services**

The Hostos Academic Learning Center (HALC), located in C-596, is a complete learning environment that allows students to receive the academic help they need in a setting that is rich in resources and supports academic success. Throughout the academic year, HALC schedules activities that focus on the skills development of students, including tutorial support, self-guided tutorials, Basic Skills Preparatory workshops, and in-center workshops, some of which are offered through the Writing Center.

Hostos Counseling Center offers a variety of services in English, Spanish, French and German, including individual and group counseling, crisis intervention, consultations and referrals to on- and off-campus resources. Please call (718) 518-4351 if you are in need of any counseling support.

**Students with Disabilities**

The Americans with Disabilities Act (ADA) prohibits discrimination based on disability and requires the College to be physically and programmatically accessible. Beyond the basic requirements of the ADA, Section 504 of the Rehabilitation Act and New York State and New York City statutes, the college has created an office, Services for Students with Disabilities (SSWD) that provides services to help each student with a disability maximize his or her
potential for success. Based on an intake interview and documentation provided by a student, a variety of accommodations may be provided to assist qualified students to attain their academic objectives. Intake and counseling are provided in English and Spanish. As provided within the College Catalogue: [http://www.hostos.cuny.edu/sswd/txt/html/geninfo.html](http://www.hostos.cuny.edu/sswd/txt/html/geninfo.html).

As required by section 504 of the Rehabilitation Act of 1973 and the Americans with Disabilities Act of 1990, reasonable accommodations are provided to ensure equal opportunity for students with verified disabilities.

If you require accommodations, please contact the Accessibility Resource Center:

Gabriella Burd, Director
Patricia Salazar, Services Manager

Savoy (D) Building
120 Walton Ave, Room D101 P
Bronx, NY 10451
Phone: (718) 518-4467 (Voice)
       (718) 518-4454 (Voice/TTY)
E-mail: gburd@hostos.cuny.edu
        psalazar@hostos.cuny.edu

If you are already registered with Accessibility Services and have a letter from them verifying that you are a qualified student with a disability, please present the letter to the instructor as soon as possible. The instructor will work with you and Accessibility Services to plan and implement appropriate accommodations.

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Course Schedule
Week One – Introduction and Overview of Food Studies

Day 1: Course introduction and student interest assessment

Assignment for next class:


Day 2: Why study food? What is “food studies”? Where can a degree in food studies lead?

Assignment for next class:


Week Two – Food Systems and Social Justice

Day 1: Food systems and the importance of a ‘systems’ approach in studying food

Assignment for next class:

- Use the Internet to identify one New York City-based organization that uses the word “food justice” on its website. What does the organization do? What food systems issues does it address? Who runs it? Which borough is it located in? Be prepared to present this in class next time.

Day 2: The Food Justice Lens

Assignment for next class:

- Two- to three-page personal reflection on food systems and social justice.
Week Three – “Healthy” Eating and Public Health Disparities

Day 1: Diet-related health issues
Due today: Personal reflection.

Assignment for next class:


Day 2: Food security/community food security

Assignment for next class:


Week Four – Food, Culture, and Health

Day 1: Questioning the meaning of “(un)healthy” habits

Assignment for next class:


Day 2: Hunger and health in New York City

Assignment for next class:

Week Five – Food Cultures in New York City

Day 1: “Gastropolis” and food cultures in New York City

Assignment for next class:


Day 2: “Gastropolis” and food cultures in New York City

Assignment for next class:

- Study for Exam 1

Week Six—Exam: Researching the Food System (Introduction)

Day 1: Exam 1

Assignment for next class:


Day 2: Social science and analyzing food systems data; why and how?

Assignment for next class:

- Yen Liu, Y. 2012. Good Food + Good Jobs for All: Challenges and Opportunities to Advance Racial and Economic Equity in the Food System. p 1-34
- Begin work on a typed outline of the main ideas that you’d like to explore in your paper. We will use these in a peer discussion about your semester paper next week.

¹ Or similar introduction to social science book. The 2008/13th edition of this book is in HCC library.)
Week Seven — Researching the Food system

Day 1: Using data to understand the food system: Good Food, Good Jobs report

Assignment for next class:

- Study two maps and related tables in *The Atlas of Food: Who Eats What, Where, and Why*. Identify the data sources for these maps (in the back of the book), and come to class prepared to discuss your topics with a classmate.
- Finalize the typed outline of the main ideas that you’d like to explore in your paper and bring these to class for a peer discussion about your semester paper.

Day 2: Using maps to understand the food system/Peer discussion about your semester paper. 
**Due today: Typed outline.**

Assignment for next class:

- *Following the peer discussion of your semester paper, you should be working on the draft paper each week until it is due. It is advised to consider this a homework assignment each week, in addition to the assigned readings.*

Week Eight— Food and Environment

Day 1: Food and ecosystems

Assignment for next class:


Day 2: What is a “food environment?”

Assignment for next class:

Week Nine — Food and Agriculture Policy

Day 1: What is food policy? Examples in New York City and NY State.

Assignment for next class:


Day 2: National and international food and agricultural policies

Assignment for next class:

- Work on draft paper

Week Ten — Food movements and advocacy

Day 1: Food and social change

Assignment:

- Work on draft paper

Day 2: Food movements, actors, and initiatives, and strategies

Due today: Draft paper

- Examples from the Bronx (Guest speaker)

Assignment for next class:

Week Eleven—Race in Food Systems and Food Movements

Day 1: Race in the study of food

Assignment for next class:


Day 2: Anti-racism in food movements?

Assignment for next class:

- Jayaraman, S. (2012). The Hands that Feed Us: Challenges and Opportunities for Workers Along the Food Chain. (Selections from this 85 page report.)

Week Twelve—Exam #2: Work in the “food chain”

Day 1: Work in the food chain (possible guest speaker)

Assignment for next class:

- Study for Exam 2

Day 2: Exam #2

Assignment for next class:

- Work on final paper

Week Thirteen—Jobs and Entrepreneurship in the Food Sector

Day 1: Guest speaker (Hostos Workforce Development representative)

Assignment for next class:

- Read Hot Bread Kitchen website. Come to class with one question the guest speaker.
- Work on final paper

Day 2: Guest speaker/field trip Hot Bread Kitchen

Assignment for next class:

- Work on final paper
- Prepare typed comments for in-class discussion of our semester’s work.
Week Fourteen—Food Scholarship

*Due today: Typed comments for in-class discussion*

Day 1:
Presenting your work (Guest Speaker - on presentations). Class discussion: What have we learned? What do we still want to know?

*Assignment for next class:*

* Final work on semester paper and presentation

Day 2: Studying food at Hostos and four-year institutions: What are the opportunities?

(Guest Speaker - Food studies programs in NYC or region)

*Assignment for next class:*

* Final work on semester paper and presentation

Week Fifteen—Student presentations and Final Papers Due

Day 1: Final Presentations

*Due today: All papers due via email before class or hard copy at the beginning of the hour.*
FS 120 Food Studies II: Food, Environment, and Justice

3 Credits

SYLLABUS

Prerequisites: FS 101 and BIO 110 or 210 or BIO 120

Course Description

This course is a continuation of Food Studies I, delving more deeply into environmental aspects of the food system from natural science and environmental justice perspectives. Topics include methods of agricultural production and how they impact and are impacted by natural systems; nutrient cycling in agriculture and food systems; environmental impacts of food processing, packaging, transportation, and waste disposal. Environmental justice implications of course topics are also discussed. The course includes field trips and/or guest lectures.

Course Books:


Faculty Information -TBD

Course Meetings -TBD

Additional Required Course Materials

Additional readings will be provided via Blackboard.

Student Learning Outcomes

Over the course of the semester students will:

- Deepen understandings of the food system developed in Food Studies I, becoming familiar with the impacts of the food system on the environment at multiple scales
- Become familiar with the concept of environmental justice, and begin to understand food systems environmental issues through an environmental justice lens
- Develop baseline and culturally diverse understandings of agroecology, and basic ecological elements in agricultural production
- Develop critical awareness of contemporary environmental issues pertaining to the food system
- Develop critical thinking, writing, and public communication skills through group and individual work

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<tr>
<td>Personal reflection</td>
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<td>Week 5</td>
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<tr>
<td>Paper outline</td>
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<td>Week 9</td>
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<tr>
<td>Exam #2</td>
<td>20%</td>
<td>Week 8</td>
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<tr>
<td>Draft paper</td>
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<td>Week 11</td>
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If you require accommodations, please contact the Accessibility Resource Center:

Gabriella Burd, Director  
Patricia Salazar, Services Manager

Savoy (D) Building  
120 Walton Ave, Room D101P  
Bronx, NY 10451  
Phone: (718) 518-4467 (Voice)  
(718) 518-4454 (Voice/TTY)  
E-mail: gburd@hostos.cuny.edu  
psalazar@hostos.cuny.edu

If you are already registered with Accessibility Services and have a letter from them verifying that you are a qualified student with a disability, please present the letter to the instructor as soon as possible. The instructor will work with you and Accessibility Services to plan and implement appropriate accommodations.
Course Schedule

UNIT I. Understanding Food and Environment

- What are the connections between food that we eat and the Earth’s ecosystem?
- How do diverse peoples and cultures view food and the environment?

Week One – Introduction to course topics

Day 1: Course introduction and overview

Assignment for next class:

- Use the Internet to search for one news item related to food and the environment that has appeared in the New York Times in the past 30 days. Read the article and come prepared to present the main points in class next time.

Day 2: Food and the environment

Assignment for next class:


Week Two – Agroecology

Day 1: What is agroecology? How does it help us understand the food system?

Assignment for next class:


Day 2: Traditional agricultural knowledge and agroecologies

Assignment for next class:


Week Three – Foodways and agroecological practices

Day 1: Understanding indigenous food systems through an environmental justice lens

Assignment for next class:
Day 2: African American food ways

Due today: Personal reflection

Assignment for next class:


UNIT II. Agriculture and Environmental Systems

- How do different agricultural practices impact the environment?
- How do societal dietary habits and choices impact the environment?

Week Four – Agricultural Systems

Day 1: Agroecosystems services

Assignment for next class:


Day 2: Global and Industrialized Agrifood Systems

Assignment for next class:


Week Five – Industrial Agriculture and the Sustainable Agriculture Framework

Day 1: Comparing industrial agriculture to “sustainable agriculture”; In-class review for Exam 1

Assignment for next class:

- Study for Exam 1
Day 2: Exam 1

Assignment for next class:

Week Six — Abiotic elements in cropping systems

Day 1: Overview: Soils, biodiversity, and energy

Assignment for next class:

Day 2: Soil chemistry and nutrient balances

Assignment for next class:

Week Seven — Pesticides and their impacts

Day 1: The costs of pesticide use in agriculture

Assignment for next class:
- Prepare 2 questions for our guest speaker on [day 2]. Email these questions to the instructor before next class period.

Day 2: Reducing pesticide use

Guest speaker (e.g., agroecologist, farm worker advocate)

Assignment for next class:
- Begin work on a typed outline of the main ideas that you'd like to explore in your paper. We will use these in a peer discussion about your semester paper next week.

Week Eight — Livestock and the environment

Day 1: Meat, production and consumption
Assignment for next class:

- Finish paper outline and prepare for in-class discussion.

Day 2: Peer discussion about your semester paper; review for Exam #2

Due today: Typed outline.

Assignment for next class:

- Study for exam #2

UNIT III Contemporary Agri-food issues

- What are key issues facing agricultural viability and sustainability, and how might these impact society?
- How are various social actors responding to contemporary food/environmental issues?
- What types of jobs or entrepreneurial opportunities might be available to address these issues?

Week Nine — Exam/urban agriculture and the environment

- Day 1: Exam 2.

Assignment for next class:


Day 2: Urban agriculture

Assignment for next class:


Week Ten — Climate change and genetic engineering (GMOs)

Day 1: Food and climate change

Assignment for next class:


Day 2: Genetic engineering/GMOs

Assignment for next class:
• Work on draft paper.

Week Eleven—Farmland and fracking: “local” and “organic” agriculture

Due this week: Draft paper

Day 1: The debate over farmland and fracking

Assignment for next class:

• DeLind, L. B. (2010). Are local food and the local food movement taking us where we want to go? Or are we hitching our wagons to the wrong stars? Agriculture and Human Values, 28(2), 273–283.
• Finish draft paper.

Day 2: Local “versus” organic: A meaningful debate?

Assignment for next class:


Week Twelve—Final foods and their consequences

Day 1: Food industry and life cycle assessments

Assignment for next class:


Day 2: Next steps along the food supply chain

Assignment for next class:


Week Thirteen—Food hubs and food jobs

Day 1: Food hubs

Assignment for next class:

• Guest speaker or field trip (e.g., food logistics expert, to sustainable food warehouse)
Day 2: “Good Food Jobs”

Assignment for next class:

- Work on final paper and presentation; email your paper to your review partner [prior to next class; Date TBA.]

Week Fourteen — Course conclusions

Day 1: Revisiting environmental justice in the food system

Assignment for next class:

- Review your partner’s paper for in-class critique next class period.

Day 2: In-class working session (final paper and presentation)

Assignment for next class:

- Finish final paper revisions
- Practice presentation with a peer or family member

Week Fifteen — Student presentations

Due this week: Final paper and presentation on paper topic

Day 1: Final presentations
Assignments

- **Personal reflection**
  Students will write a two-page personal reflection on agroecology, based on course readings and discussions. Topics covered in these sessions include the Western scientific concept of agroecology, indigenous concepts and agroecological practices from the Americas and Africa, and an environmental justice understanding of agroecology frameworks. For the written assignment, students will reflect on these frameworks based on their understanding of both the concepts and tensions between them, and articulate their thoughts about how these frameworks can be used to understand the local food environment.

- **Exam 1**
  Exam 1 will include both multiple choice and essay questions addressing topics covered in weeks 1-5.

- **Paper outline**
  Students will prepare a 2-3 page outline of their final paper, which will analyze a topic of their choice related to food, the environment, and social justice. Students will receive guidance on developing an outline that contains a topic, problem statement, supporting examples drawn from relevant sources, and a strong conclusion.

- **Exam #2**
  Exam 2 will include both multiple choice and essay questions addressing topics covered in weeks 5-8.

- **Draft paper**
  Based on feedback from their paper outline, students will prepare a draft version of their final paper. The draft should contain all sections of the paper, allowing the instructor to provide constructive criticism for the final paper.

- **Final paper**
  Students will write a 5-7 page paper analyzing a specific aspect of food and the environment that has been examined through course readings and discussions, including relevant topics discussed in weeks 9-14 of the semester, as appropriate. Students will choose a topic of interest (to be approved through the Paper Outline stage earlier in the semester), and write a cohesive argument that examines the topic. Papers receiving full credit will show evidence of abilities to think broadly, critically, about food and the environment, and begin to construct a sound and critical argument that draws from course material.

- **Final presentation**
  Students will present the key points from their final paper to their classmates and professor during final exam week, using Powerpoint or a similar program (e.g., Google docs). Students will receive guidance in preparing an effective presentation that explains the focus paper, the analysis, and the conclusion following the logic of the written paper, as well as pointers on delivering professional presentations before an audience.
FS 200 Food Policy, Advocacy and Activism

SYLLABUS

3 Credits

Prerequisites: Food Studies I, Food Studies II

Faculty Information - TBA

Course Description

This course explores food policy making, food activism, and policy advocacy initiatives at local, regional, national, and international scales. We begin by discussing the concepts of food policy and food advocacy, and proceed to examine how food policy making intersects with and impacts public health, environment, and the regional food system. Jobs in food policy and advocacy sectors are discussed throughout the semester, and guest speakers are invited to contextualize course concepts in the New York City environment.

Course Meetings - TBA

Course Books


Additional Required Course Materials

Additional readings will be provided via Blackboard.

Student Learning Outcomes

Over the course of the semester students will:

- Develop familiarity with food policy making and its impacts on public health, the environment, social justice, and regional food systems
- Understand intersections between food policy, politics, and advocacy at multiple scales
- Deepen awareness of advocacy and activist movements in New York City, nationally, and globally
- Draw connections between course concepts to contemporary issues and initiatives
- Learn about future educational and job opportunities in the fields of food policy and/or advocacy
- Refine critical thinking, writing, and public communication skills through group and individual work

### Assignments and Grading

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<thead>
<tr>
<th>Assignment</th>
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<td>Week 4</td>
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<tr>
<td>Exam #1</td>
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<td>Week 5</td>
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<tr>
<td>Good food jobs assignment</td>
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<td>Week 6</td>
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<tr>
<td>Outline of final essay</td>
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<td>Final essay</td>
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<td>Final presentation/discussion</td>
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<td>Participation, including attendance</td>
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### Teaching Methods

1. Classroom lectures and discussions
2. Guest speakers
3. Supervised peer working sessions

### Classroom Policies

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Course Requirements

Students must have:

- Access to required textbooks
- Access to the Internet
- Active Blackboard and email accounts (Blackboard and email will be used for communication and posting course materials, assignments, and web site links)

Student Responsibilities

1. Use Blackboard and keep Hostos email accounts active.
2. Keep Hostos email accounts accessible for new mail. Check and empty email daily.
3. Communicate with faculty using their Hostos email.
4. Come to class on time.
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8. Demonstrate increased critical thinking and analytical skills.

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**Course Schedule**

**UNIT 1. UNDERSTANDING FOOD POLICY**

This unit addresses the following overarching questions:
- **What is food policy and how does it impact diverse aspects of society, the environment, and public health?**
- **How does food policy making play out at different scales, and in different contexts?**
- **How do policy and politics intersect to shape our food system?**

**Week One – Introduction**

Day 1: Course introduction

**Assignment for next class:**

Day 2: Food policy themes

**Assignment for next class:**

**Week Two – What is food policy?**

Day 1: Defining food policy

**Assignment for next class:**

Day 2: Food policy in the New York City region

**Assignment for next class:**

**Week Three – Policy, power, and change**

Day 1: Key public policy concepts
Assignment for next class:

Day 2: Nutrition policy

Assignment for next class:

Week Four – Food policy and food politics

Day 1: Food policies and nutrition in the United States

Assignment for next class:
- Use the Internet to search for a New York Times article published in the last 12 months that addresses an aspect of food policy. Read the article and write a 2-page reflection on how the past two readings can help us understand the topic in the article. Your reflection will be due by the start of class next time, and we will use these for our class discussion.

Day 2: Debating food policy (in-class discussion); Review for Exam 1

Due today: personal reflection

Assignment for next class:
- Study for Exam 1.

Week Five – Exam 1; Guest speaker

Day 1: Exam 1

Assignment for next class:

Day 2: Supply chains

Assignment for next class:
- TBD [as relevant to guest speaker]
UNIT II. IMPROVING THE FOOD SYSTEM THROUGH POLICY

This unit addresses the following overarching questions:

- What types of policies can help improve aspects of the food system, including environment, public health, and economic inequity in the food sector?
- How do policy strategies differ with context, whether urban or rural, domestic or international?

Week Six – Supply chains and “good food jobs”

Day 1: Guest speaker [e.g., supply chain management; food hubs]

Assignment for next class:
- Examples of food supply chain jobs: Use the Good Food Jobs website (www.goodfoodjobs.com) to search for 3 jobs in supply chain management. Note the title of the job, location, primary responsibilities, and application instructions. We will discuss these in class next time.

Day 2: Good food jobs along the food supply chain

Due today: Good Food Jobs assignment

Assignment for next class:

Week Seven – Environmental policy and food

Day 1: Environmental impacts of food policies

Assignment for next class:

Day 2: Policy responses to food and the environment

Assignment for next class:
Week Eight – Social justice, ecological, and public health policy

Day 1: Food, policy, and social justice

Assignment for next class:

Day 2: Public health and policy

Assignment for next class:

Week Nine—Urban food systems strategies

Day 1: Issues

Assignment for next class:

Day 2: Strategies; review for exam #2

Assignment for next class:
- Study for Exam 2

UNIT III. FOOD ACTIVISM AT MULTIPLE SCALES

This unit addresses the following overarching questions:

- What is food activism, and how do food activists engage in making change in their communities?
- What tensions arise as food activists collaborate across regional, national, and sectoral boundaries?
- What future opportunities exist to improve our communities through food policy advocacy and activism?

Week Ten – Food activism: an introduction

Day 1: Exam 2
Assignment for next class:


Day 2: Conceptualizing food activism

Assignment for next class:


Week Eleven—Global and transnational food activism

Day 1: Food sovereignty

Assignment for next class:


Day 2: Food activism in Seattle

Assignment for next class:


Week Twelve—Food activism in New York City

Day 1: Food and health activism in New York City

Assignment for next class:


Day 2: Urban agriculture policy and activism

Assignment for next class:

Week Thirteen—Envisioning and enacting the future

Day 1: Youth involvement in food activism

Assignment for next class:

Day 2: Emerging issues in food policy and advocacy

Assignment for next class:
- Outline of four-page essay that summarizes the themes of this course, and how you think that you will use course concepts in a future educational or work setting. This will be due before class next time.

Week Fourteen—Policy and advocacy in New York City
Due today: Outline

Day 1: Guest speaker (e.g., Bronx-based food policy advocate; Food Systems Network NYC representative; Food Chain Workers' Alliance representative)

Assignment for next class:
- Revise essay and email to peer for in-class workshopping.

Day 2: In-class working session

Assignment for next class:
- Finish four-page essay. This will be due in class, and we will use this for the basis of our final discussion in lieu of a final exam.

Week Fifteen—Course conclusions
Due today: Final essay

Day 1: Student-led course conclusion
FS 220 Food, Health, and Environment

SYLLABUS

3 Credits
Prerequisites: FS I and FS II

Faculty Information - TBD
Instructor Name
Office
Office Hours
Phone
Email

Course Description

This course examines the interactions between food production and consumption, health, and environment through environmental and food justice lenses. Building on concepts developed in Food Systems I and II, it explores topics such as public health disparities and their structural causes, environmental toxins in the food system and their impact on workers and consumers, as well as policies that have or could impact these outcomes, in both historical and contemporary contexts. Students will work together to apply classroom knowledge to investigating food security and health at the neighborhood level in NYC. The course includes field trips and/or guest lectures to complement readings, assignments, and in-class discussions.

Course Meetings - TBA
Course Books and Readings


Additional Required Course Materials
Additional copyrighted materials are the sole property of the instructor and available on blackboard free for students enrolled in this course only.

Student Learning Outcomes

Over the course of the semester students will:

- Develop understandings of the food system and its impacts on the health of humans and the environment.
- Become familiar with the interdisciplinary field of food studies and the importance of a systems approach to studying food and the food system.
- Develop critical awareness of food related health issues in New York City and beyond.
- Develop basic understanding of health sciences methods used to analyze food systems and public health information.
- Become familiar with community-based organizations addressing health, environmental and social justice in New York City.
- Learn about opportunities to continue food studies education at Hostos Community College and select four-year institutions.
- Develop critical thinking, writing, and public communication skills through group and individual work.

Assignments and Grading

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<td>Test #1</td>
<td>10%</td>
<td>Week 4</td>
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<tr>
<td>Test #2</td>
<td>10%</td>
<td>Week 7</td>
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<td>Test #3</td>
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<td>Week 9</td>
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<td>Test #4</td>
<td>10%</td>
<td>Week 14</td>
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<tr>
<td>Final presentation (group project: community food assessment) and summaries</td>
<td>25%</td>
<td>Week 15</td>
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Teaching Methods

1. Audiovisual presentations and handouts
2. Classroom lectures, discussions and demonstrations.
3. Field trips.
4. Team-based and project-based learning.
5. “Writing to Learn” activities (formal and informal writing)

Classroom Policies

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Student Responsibilities

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3. Communicate with faculty using their Hostos email.
4. Come to class on time.
5. Perform all lesson objectives, activities and reading assignments.
6. Complete and hand in all written assignments on or before their due date.
7. Demonstrate proficiency with all homework and written assignments.
8. Demonstrate a significant amount of critical thinking and analysis. Therefore, the student’s quantity and quality of participation will be factored into the grade.

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3. Students who arrive late for an exam will not receive extra time to complete the exam.
4. No credit will be given for questions left unanswered regardless of the reason.
5. Students are responsible for correctly completing all test answer sheets.
6. When using a scantron answer sheet, a number "2" pencil must be used to fill in the bubbles.
7. No credit will be given for incompletely erased answers or blanks on a scantron.
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Gabriella Burd, Director
Patricia Salazar, Services Manager

Savoy (D) Building
120 Walton Ave, Room D101P
Bronx, NY 10451
Phone: (718) 518-4467 (Voice)
(718) 518-4454 (Voice/TTY)
E-mail: gburd@hostos.cuny.edu
psalazar@hostos.cuny.edu

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## Course Schedule

<table>
<thead>
<tr>
<th>Week/Session</th>
<th>Topics and Readings</th>
<th>Notes and Due Dates</th>
</tr>
</thead>
<tbody>
<tr>
<td>Week 1/</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Session 1</td>
<td>Introduction and course overview</td>
<td></td>
</tr>
<tr>
<td>Session 2</td>
<td>Understanding the Social Determinants of Health</td>
<td></td>
</tr>
<tr>
<td>Week 1/</td>
<td>Foundations of community health and social justice in the food system - accessing data and information; What's cooking in your food system; available at: <a href="http://www.foodsecurity.org/CFAguide-whatscookin.pdf">http://www.foodsecurity.org/CFAguide-whatscookin.pdf</a></td>
<td>(library science workshop including use of NYC DOHMH resources)</td>
</tr>
<tr>
<td>Session 2</td>
<td></td>
<td>Unit 1 Production</td>
</tr>
<tr>
<td>Week 2/</td>
<td>Industrial food production; Why the Fries Taste Good (Schlosser)</td>
<td></td>
</tr>
<tr>
<td>Session 2</td>
<td>Conventional Animal Production; On the Range; Cogs in the Great Machine (Schlosser)</td>
<td></td>
</tr>
<tr>
<td>Week 3/</td>
<td>The Continuing Transformation of Foods; Food in America and the World 1945-2002 (Harper and LeBeau)</td>
<td>(overview of Term Project)</td>
</tr>
<tr>
<td>Session 1</td>
<td>Healthy Food Environments; Glanz et al. (2005) Healthy nutrition environments; Am J Health Promotion</td>
<td>Form Groups and Distribute Neighborhoods for Term Project</td>
</tr>
<tr>
<td>Session 2</td>
<td>Food, Population and Environment; pg162-181 in Harper and LeBeau</td>
<td></td>
</tr>
<tr>
<td>Week 4/</td>
<td>Unit I Test/Assessment</td>
<td></td>
</tr>
<tr>
<td>Session 2</td>
<td>Food Safety Overview; Nestle - The Politics of Food Borne Illness (from Safe Food)</td>
<td>Unit 2 Distribution and Food Safety</td>
</tr>
<tr>
<td>Week 5/</td>
<td>Tampering with Foods; Wilson B - German Ham and English Pickles (from Swindled)</td>
<td></td>
</tr>
<tr>
<td>Session 2</td>
<td>Food Contamination; What's in the Meat (Schlosser)</td>
<td></td>
</tr>
</tbody>
</table>
Week 7:
Session 1
Unit 2 Test/Assessment

Week 7:
Session 2
Working in Agriculture:
Martínez-Salazar E. - The “Poisoning” of Indigenous Migrant Women Workers and Children (from Women Working the NAFTA Food Chain).

Week 8:
Session 1
Restaurant Workers:
Jayaraman S. - The Hands on your Plate (from Behind the Kitchen Door)

Week 8:
Session 2
Fast Food:
Behind the Counter (Schlosser)

Week 9:
Session 1
Food Production Workers:
The Most Dangerous Job (Schlosser)

Week 9:
Session 2
Unit 3 Test/Assessment

Week 10:
Session 1
Food Practices:
Foodways; Eating and Cuisines in America (Harper and LeBeau)

Week 10:
Session 2
Consumer Choice:
Nestle M - The Food Industry and “Eat More”, and The Politics of Food Choice (from Food Politics)

Week 11:
Session 1
Obesity:
Berg J - Are Americans Hungry or Fat? (from All You Can Eat)

Week 11:
Session 2
Hunger:
Berg J - Who is Hungry in America (from All You Can Eat)

Week 12:
Session 1
Food Access - overview
Healthier Food Retail; available at:

Week 12:
Session 2
Food Environments and Food Access:
Re-Storing America’s Food Deserts (Winne)

Week 13:
AFN 400 - consumers taking back the food system:
<table>
<thead>
<tr>
<th>Session 1</th>
<th>Community Supported Agriculture (Winne)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Week 13/ Session 2</td>
<td>Grassroots responses for food systems change: Moffett D &amp; Morgan ML - Women as Organizers; Building Confidence and Community through Food (from Women Working the NAFTA Food Chain)</td>
</tr>
<tr>
<td>Week 14/ Session 1</td>
<td>Field Trip/Service Learning: La Finca Del Sur (urban farm)  Group Project: Group Work Log Due</td>
</tr>
<tr>
<td>Week 14/ Session 2</td>
<td>Unit 4 Test/Assessment</td>
</tr>
<tr>
<td>Week 15/</td>
<td>Group Presentations</td>
</tr>
</tbody>
</table>
Assignments

Food, Environment and Public Health - Term Research Project [Instructor’s Notes]

Community Food Assessment Group Project:
The purpose of this assignment is to help students gain a better understanding of community food systems by investigating elements of the food system in various neighborhoods across New York City. Using online resources, phone calls and site visits, student groups will investigate the availability of different food types in a "community". They will explore factors such as types of food sources, location, cost, quality, gaps in food accessibility, and other challenges faced by members of the community. Students will consider attempts in the community to address the food system problems by identifying government and community-based organizations working to address food systems issues.

Instructions

1. Select {alternatively, the instructor may assign neighborhoods to groups} a "community": The "community" students choose should be a defined geographic location with which they are familiar and are able to give a current and accurate description.
2. Explore the community and its food system: Students will use the outline to closely examine the many different aspects of the community and its local and regional food system. Students should provide a summary of their findings, focusing on the most important or notable features of the particular community. Students are encouraged to take photographs and collect other visual material from the community food environment where possible and appropriate.
3. Analyze the community's food system: Students will provide an assessment of their most important findings and prepare them in the form of a one-two page executive summary and a 20 minute presentation. Analysis should include:
   - What are the key challenges in the food environment?
   - What community assets are present that facilitate food access and health?
   - What community based organizations or other stakeholder groups might benefit from students’ findings?

Deliverable
Student groups will provide an executive summary and PowerPoint presentation of their community food assessment.

**Grading Criteria** (suggested value = 25% of final grade)

Students will be graded on how well they:
- Summarize the key characteristics of the community in relation to food access and availability
- Evaluate the strengths and weaknesses of the food system in their final assessment
- Teamwork and presentation skills

**Outline**

Students will use the following outline as a guide to investigate and evaluate their chosen community's food system. Students will note sources of information where requested or where appropriate by standard academic practices.

**Section 1: Community and population description.** Students will name and describe the important characteristics of the community they are investigating. Students should include:
- Geographic location, size, economic and health indicators
- Other unique and notable community features related to the food system and pertinent to this assignment (ie, transportation infrastructure, land use, development and alternative food networks issues)

Students will provide an overview of the population in the community and any unique features of the community (providing sources where available).
- Descriptive summary (ie, population size, age, income, educational levels, race/ethnicity).
- Other unique and notable population characteristics (ie, large employers in the area, migration patterns)

**Section 2: Food sources and availability.** Students will briefly describe the sources and types of food sources available to and utilized by various members of the community. Students should use the categories below as a guide for what to include, focusing on characteristics that are most important or notable for the community and summarizing their findings. Students should include
food sources in and around the community, considering differences in access, utilization and/or purchasing of types of food among different population subgroups.

- Large, corporate grocery store chains
- Smaller, specialty grocery stores and markets
- Corner stores and convenience marts
- Cooperatively owned markets
- Restaurants and fast food outlets
- Farmers markets
- Urban farms
- CSA's (community supported agriculture)
- Community gardens, individual gardens
- Direct farm purchasing programs (farm-to-school, farm-to-restaurant, etc)
- Food Assistance (NGO, faith-based, government-operated, etc.)
- School-based meals (school breakfast and lunch programs)
- Other food sources (please comment)

Section 3: Food system assessment: Students will summarize the strengths, weaknesses and major gaps in the community's food system. They will briefly describe efforts currently underway to address these problems, if any. Students will offer their own suggestions for what can be done to improve their community's food system.
Suggested readings and resources for course assignments:

Healthier Food Retail {a guide developed by the CDC} available at: http://www.cdc.gov/obesity/downloads/HFAssessment.pdf


FS 225 Food Studies Career Practices

SYLLABUS

1 Credit

Prerequisites: Food Studies I; Food Studies II

Co-requisites: Food, Health and Environment OR Food, Policy, and Advocacy

Faculty Information -TBD

Course Description

This course prepares students to pursue career and/or future academic opportunities following the completion of their Food Studies Associate’s Degree. The course covers identification of career goals; job and academic program search skills; development of effective resumes and cover letters; interviewing skills; entrepreneurship; and employee rights. The course also walks students through the process of identifying a site for the required Food Studies internship, as well as aspects of applying/transferring to Bachelor’s program, as appropriate. The course includes presentations from Hostos Community College Career Services, Transfer Services, and other key campus and off-campus resource centers.

Course Meetings -TBD

Course Book:


Additional Required Course Materials

Additional readings will be provided via Blackboard.

Student Learning Outcomes

Over the course of the semester students will:

- Gain familiarity with job and academic opportunities in food studies/the food sector;
- Gain experience conducting job and internship searches;
- Gain experience researching academic programs in food studies and related fields;
- Learn how to prepare necessary job and internship application materials;
- Prepare a professional resume, cover letter, and list of references;
- Apply to one or more potential internship sites for the required Food Studies internship;
- Become familiar with best practices in interviewing and participate in a mock interview;
- Become familiar with employee rights, unions, and other employee resources;
- Consider entrepreneurship and other post-graduate opportunities in the food sector.

Additional: Students hoping to transfer to a Bachelor’s program upon graduation will prepare parts of their application materials as a part of this course.

### Assignments and Grading

<table>
<thead>
<tr>
<th>Assignment</th>
<th>Percent of course grade</th>
<th>Due</th>
</tr>
</thead>
<tbody>
<tr>
<td>Career vision statement</td>
<td>5</td>
<td>Week 3</td>
</tr>
<tr>
<td>Informational interview assignment</td>
<td>10</td>
<td>Week 5</td>
</tr>
<tr>
<td>Draft resume</td>
<td>10</td>
<td>Week 6</td>
</tr>
<tr>
<td>Draft cover letter</td>
<td>10</td>
<td>Week 6</td>
</tr>
<tr>
<td>Final resume</td>
<td>15</td>
<td>Week 8</td>
</tr>
<tr>
<td>Final cover letter</td>
<td>15</td>
<td>Week 8</td>
</tr>
<tr>
<td>University application (as relevant) OR Report on food sector employment</td>
<td>10</td>
<td>TBD (based on university calendars)</td>
</tr>
<tr>
<td>Mock interview</td>
<td>10</td>
<td>Week 9</td>
</tr>
<tr>
<td>Internship application</td>
<td>10</td>
<td>Week 10</td>
</tr>
<tr>
<td>Final presentation</td>
<td>5</td>
<td>Week 15</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>100%</strong></td>
<td></td>
</tr>
</tbody>
</table>

### Teaching Methods

1. Classroom lectures and discussions
2. Guest presenters
3. Supervised working sessions

### Classroom Policies

1. Cell phones and beepers must be turned off or placed on “vibrate” mode when in class.
2. Students arriving after the class has begun should enter the classroom quietly without making any unnecessary noise.
3. Unruly and/or disruptive behavior may be subject to disciplinary action.
4. Students who interrupt the educational process will be dismissed from the class and referred to the Disciplinary Committee to determine if negative incentives or additional sanctions, including suspension or dismissal from the program, are warranted.

### Course Requirements

Students must have:
Access to required textbooks
Access to the Internet
Active Blackboard and email accounts (Blackboard and email will be used for communication and posting course materials, assignments, and website links)

Student Responsibilities

1. Use Blackboard and keep Hostos email accounts active.
2. Keep Hostos email accounts accessible for new mail. Check and empty email daily.
3. Communicate with faculty using their Hostos email.
4. Come to class on time.
5. Perform all lesson objectives, activities and reading assignments.
6. Complete and hand in all written assignments on or before their due date.
7. Demonstrate proficiency with all homework and written assignments.
8. Demonstrate increased critical thinking and analytical skills.

Attendance Policy

1. All classes are mandatory.
2. If a student is absent from more than 15% of the classes the instructor may lower the grade or fail the student for excess absences.

Lateness Policy

1. Students are required to come to class on time.
2. Three tardies will be counted as one absence from class.

Academic Integrity

Academic Dishonesty is prohibited in The City University of New York and is punishable by penalties, including failing grades, suspension, and expulsion, as provided within the College Catalogue: http://www.hostos.cuny.edu/sdem/student_hlth_aip.html. Students are responsible for upholding the academic integrity of the program by not participating, either directly or indirectly, in acts of cheating and by discouraging others from doing so. Students' responsibilities include, but are not limited to, the following.

Integrity in Written Assignments

1. Written assignments must be the product of the student's own research.
2. No student shall submit work that has been written by someone else or copied from an outside source.
3. No student shall submit work that has been previously submitted in either whole or part for academic credit. This is termed "self-plagiarism.
4. Late assignments may not be accepted; if accepted, points will be deducted.
5. Students who engage in academic dishonesty will receive a grade of 0 for the assignment.
6. All violations of the academic integrity policy shall be referred to the Disciplinary Committee to determine if negative incentives or additional sanctions - including suspension or dismissal from the program - are warranted.
7. HCC Library offers workshops and provide assistance on how to avoid plagiarism.

Examination Policies
N/A. Exams are not given in this course.

Tutorial and Counseling Services

The Hostos Academic Learning Center (HALC), located in C-596, is a complete learning environment that allows students to receive the academic help they need in a setting that is rich in resources and supports academic success. Throughout the academic year, HALC schedules activities that focus on the skills development of students, including tutorial support, self-guided tutorials, Basic Skills Preparatory workshops, and in-center workshops, some of which are offered through the Writing Center.

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Course Schedule

Week One - Course introduction

Assignment for next week:
  - "Introduction," Pages xi-xx.
  - Chapter 1, "Getting Started" Pages 1-28.
  - Chapter 2, "Stop Being a Student and Start Being a Professional" Pages 29-48.

Week Two — Internship and career opportunities in the food sector
[Guest presenter: HCC Workforce Development and/or Center for Bronx Non-Profits]

Assignment for next week:
- Career vision statement assignment

Week Three — Further educational opportunities in food studies
Due today: Career vision statement assignment

[Guest presenter: HCC Transfer Services and/or Syracuse/Lehman/other articulation partners]

Assignment for next week:
- Informational Interview assignment (Interview with 2-3 potential internship sites.)

Week Four — Search strategies (Jobs and Academic programs)

[Guest presenter: HCC Career Services]

Assignment for next week:
- Identify 3-4 prospective internship sites. The list of names and brief description will be due via email prior to class next week.

Week Five — Preparing a resume, cover letter, and list of professional references
Due today: Informational interview assignment

[Guest presenter: HCC Career Services]

Assignment for next week:
- Prepare draft resume, cover letter, reference list for in-class workshop. This will be due via email before class and in hard copy during class.

Week Six — Resume workshop (peer and instructor review)
Due today: Draft resume, cover letter, reference list - bring 2 printed copies of each.

Assignment for next week:

In-class activity: Create and complete a LinkedIn profile, establish at least 10 contacts, two of which must be the course instructors. (Also include Social Media do’s and don’ts)

Week Seven — Relational skills (written, verbal, body language, online)

Assignment for next week:
- Revise resume and cover letter

Week Eight — Interviewing skills
Due today: Final resume and cover letter

[Guest presenter: HCC Career Services]

This class session also includes tips on networking/career fair preparation: Students learn how to connect and communicate with professionals in non-traditional settings as well as structured professional networking events

Assignment for next week:
- Prepare for in-class mock interview

Week Nine — Mock interview session

Assignment for next week:
- Submit internship applications; You will need to provide proof of having submitted your applications via email and/or in hard copy.

Week Ten — Interview critiques and feedback
Due this week: Proof of internship application.

Assignment for next week:
- TBD Additional resources provided by Career Services

Week Eleven — After the Interview: Thank You letters and other follow-up
[Guest presenter: Career Services]

Assignment for next week:
Week Twelve — Employee Rights
[Guest presenter: Career Services]

In-class activity: Communication Skills and Office Etiquette/Protocol: Class participates in role-plays of featuring common work scenarios. Strategies will be discussed to assist students with overcoming possible interpersonal dilemmas with co-workers and/or supervisors. Sexual Harassment awareness at work will also be discussed. (Students are also advised to complete sexual harassment online training & receive certificate.)

Assignment for next week:
- Pollack, Chapter 8: “Find Opportunities.” Selections from pages 233-262.
- Review your assigned website from (selected from the list below). We will discuss these in class next week:
  - Cornell University Northeast Center for Food Entrepreneurship: http://nciaa.foodscience.cals.cornell.edu
  - Karp Resources: http://www.karpresources.com
  - Hot Bread Kitchen: http://hotbreadkitchen.org
  - WHEDCo: http://www.whedco.org
  - La Cocina: http://www.lacocinasy.org

Week Thirteen — Entrepreneurship in the Good Food Jobs sector

Assignment for next week:
- Pollack, Chapter 10 “Before You Head Off Into the Real World” Pages 306-310.
- Additional TBD (as relevant to guest speaker).

Week Fourteen — Experiences of Recent College Graduates

[Guest speaker: recent college graduate(s) from Hostos; Lehman; or Syracuse University]

Assignment for next week:
- Finalize presentation about your internship for Spring semester.

Week Fifteen — Final presentations
Overview of Assignments

- **Career vision statement.** Prepare a three- to five-page vision statement about job and/or academic goals in the food sector. If these have changed during your time as a Food Studies student, please explain this in your essay.

- **Informational interviews.** Use Good Food Jobs, COMFOOD jobs, and/or other resources provided by your instructors to identify 2-3 possible internship sites. Arrange an informational interview, which can take place via phone or in person. You will write a 2-3 page report on what you learned, and you will use these interviews to help you decide where to apply for an internship.

- **Resume draft.** Based on course readings and information provided by Career Services, prepare a draft resume. This will be evaluated by your instructor and/or Career Services so that you can prepare your final resume.

- **Final resume.** Prepare your final resume, responding to evaluation of your draft resume. You will need to finalize your resume in order to apply to your internship site.

- **Cover letter draft.** Based on course readings and information provided by Career Services, prepare a draft cover letter to your preferred internship site(s). This will be evaluated by your instructor and/or Career Services so that you can prepare your final cover letter.

- **Final cover letter.** Prepare your final cover letter, responding to evaluation of your draft cover letter. You will need to finalize your cover letter in order to apply to your internship site.

- **University application.** (For students hoping to transfer to a Bachelor's program.) If you are planning to transfer to a 4-year institution after graduation from Hostos, prepare draft personal statement or other required essays. This will be evaluated by your instructor and/or Transfer Services, and you will use this feedback to finalize your application essays.

- **Report on food sector employment.** (For students not planning to transfer to a Bachelor's program.) Identify two jobs in the food sector that would interest you. Prepare a 5-6 page research report in which you: Describe the jobs, their location, application process, salary range, who the selected candidate would report to, and any other pertinent information that a potential applicant would need to know before applying. Based on course readings and discussions, include in your report questions that you would have about the positions, and any concerns that you might have about the conditions of employment.
Mock interview. Based on course readings and information provided by Career Services, prepare for the in-class mock interview for your preferred internship site. Your interview will be critiqued by your professor and/or Career Services in order to help you improve your interview skills.

Internship application. One of the practical outcomes of this course is that you will have successfully identified, and ideally obtained, an internship position for Spring semester. For this assignment you will be graded on having submitted one or more applications, and conducted follow up correspondence, based on the principles discussed in class through course readings. Students will work on this iteratively, with guidance from the instructor, throughout the semester.

Final presentation. Prepare a 5-minute presentation about your Spring semester internship. Include in this presentation: an overview of the organization or business; why you selected the site; questions/concerns that you have about beginning the internship; what you hope to learn through the internship; and how you think that the internship will help you in your post-graduate career. Presentations will be made either in front of the entire class or to a group of your peers.
FS 230 Food Studies Capstone

SYLLABUS

3 Credits

Prerequisites: Food Studies I, Food Studies II

Co-requisites:
Food, Health and Environment OR
Food, Policy, and Advocacy AND

Food Studies internship

Open to Food Studies majors only.

Faculty Information - TBD

Course Description:
This course guides students through completion of the Food Studies Associates program and the required Food Studies internship, and is required of all majors. The course integrates conceptual learning, skill-building, and experiential learning to enable students to demonstrate strong foundational knowledge about food studies and food systems. We reflect on key concepts examined in the Food Studies core courses, and draw connections between these concepts, the field based/internship experiences, and students' specific career objectives. By the end of the term, students will have completed their internship; a final paper contextualizing the internship within concepts learned through the Food Studies program; and an e-Portfolio to be used in future applications for employment and other post-graduate opportunities. Students will also give a final presentation about their internship experience in an end-of-semester program seminar.

Course Meetings - TBD

Course Books


Additional Required Course Materials

Additional readings will be provided via Blackboard.
Student Learning Outcomes

Over the course of the semester students will:

1. Contribute to in-class discussions about broad food systems issues, based on curricular and co-curricular learning;
2. Draw connections between field-based experiences (particularly their internships) and concepts learned throughout the curriculum;
3. Gain experience evaluating their own learning as Food Studies majors;
4. Refine abilities to reframe food systems challenges as potential opportunities;
5. Continue to refine professional oral and written communication skills;
6. Complete a professional e-Portfolio that can be used to gain future employment and/or academic opportunities.

Assignments and Grading

<table>
<thead>
<tr>
<th>Assignment</th>
<th>Percent of course grade</th>
<th>Due</th>
</tr>
</thead>
<tbody>
<tr>
<td>Internship field notes (weekly)</td>
<td>Included in participation grade</td>
<td>On-going assignment</td>
</tr>
<tr>
<td>e-Portfolio</td>
<td>Included in participation grade</td>
<td>In-class assignment</td>
</tr>
<tr>
<td>Critical reflections (3)</td>
<td>30% (10% each)</td>
<td>Weeks 3, 6, 11</td>
</tr>
<tr>
<td>Draft paper</td>
<td>15%</td>
<td>Week 7</td>
</tr>
<tr>
<td>Final paper</td>
<td>20%</td>
<td>Week 13</td>
</tr>
<tr>
<td>Final presentation</td>
<td>10%</td>
<td>Week 14 or 15, as assigned</td>
</tr>
<tr>
<td>Participation</td>
<td>25%</td>
<td>On-going</td>
</tr>
<tr>
<td>Total</td>
<td>100%</td>
<td></td>
</tr>
</tbody>
</table>

Teaching Methods

The course includes instructor-led discussions, critical reflection/self evaluation, in-class workshops, peer-to-peer reviews, informal presentations, and guest speakers.

Classroom Policies

1. Cell phones/beepers must be turned off or placed on "vibrate" mode during class.
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3. Unruly and/or disruptive behavior may be subject to disciplinary action.
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Course Requirements

Students must have:

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- Access to the Internet
- Active Blackboard and email accounts (Blackboard and email will be used for communication and posting course materials, assignments, and web site links)

Student Responsibilities

1. Use Blackboard and keep Hostos email accounts active.
2. Keep Hostos email accounts accessible for new mail. Check/empty email daily.
3. Communicate with faculty using their Hostos email.
4. Come to class on time.
5. Perform all lesson objectives, activities and reading assignments.
6. Complete and hand in all written assignments on or before their due date.
7. Demonstrate proficiency with all homework and written assignments.
8. Demonstrate increased critical thinking and analytical skills.

Attendance Policy

1. All classes are mandatory.
2. If a student is absent from more than 15% of the classes the instructor may lower the grade or fail the student for excess absences.

Lateness Policy

1. Students are required to come to class on time.
2. Three tardies will be counted as one absence from class.

Academic Integrity

Academic Dishonesty is prohibited in The City University of New York and is punishable by penalties, including failing grades, suspension, and expulsion, as provided within the College Catalogue: [http://www.hostos.cuny.edu/sdem/student_lifeARP.html](http://www.hostos.cuny.edu/sdem/student_life_ARP.html). Students are responsible for upholding the academic integrity of the program by not participating, either directly or indirectly, in acts of cheating and by discouraging others from doing so. Students' responsibilities include, but are not limited to, the following:

Integrity in Written Assignments

1. Written assignments must be the product of the student's own research.
2. No student shall submit work that has been written by someone else or copied from an outside source.
3. No student shall submit work that has been previously submitted in either whole or part for academic credit. This is termed "self-plagiarism."
4. Late assignments may not be accepted; if accepted, points will be deducted.
5. Students who engage in academic dishonesty will receive a grade of 0 for the assignment.
6. All violations of the academic integrity policy shall be referred to the Disciplinary Committee to determine if negative incentives or additional sanctions - including suspension or dismissal from the program - are warranted.
7. HCC Library offers workshops and provide assistance on how to avoid plagiarism.

**Examination Policies**

N/A. Exams are not given in this course.

**Tutorial and Counseling Services**

The Hostos Academic Learning Center (HALC), located in C-596, is a complete learning environment that allows students to receive the academic help they need in a setting that is rich in resources and supports academic success. Throughout the academic year, HALC schedules activities that focus on the skills development of students, including tutorial support, self-guided tutorials, Basic Skills Preparatory workshops, and in-center workshops, some of which are offered through the Writing Center.

Hostos Counseling Center offers a variety of services in English, Spanish, French and German, including individual and group counseling, crisis intervention, consultations and referrals to on- and off-campus resources. Please call (718) 518-4351 if you are in need of any counseling support.

**Students with Disabilities**

The Americans with Disabilities Act (ADA) prohibits discrimination based on disability and requires the College to be physically and programmatically accessible. Beyond the basic requirements of the ADA, Section 504 of the Rehabilitation Act and New York State and New York City statutes, the college has created an office, Services for Students with Disabilities (SSWD) that provides services to help each student with a disability maximize his or her potential for success. Based on an intake interview and documentation provided by a student, a variety of accommodations may be provided to assist qualified students to attain their academic objectives. Intake and counseling are provided in English and Spanish. As provided within the College Catalogue [http://www.hostos.cuny.edu/sswd/txt/html/geninfo.html](http://www.hostos.cuny.edu/sswd/txt/html/geninfo.html).
As required by section 504 of the Rehabilitation Act of 1973 and the Americans with Disabilities Act of 1990, reasonable accommodations are provided to ensure equal opportunity for students with verified disabilities.

*If you require accommodations, please contact the Accessibility Resource Center:*
Savoy (D) Building
120 Walton Ave. Room D101P
Bronx, NY 10451
Phone: (718) 518-4467 (Voice); (718) 518-4454 (Voice/TTY)
If you are already registered with Accessibility Services and have a letter from them verifying that you are a qualified student with a disability, please present the letter to the instructor as soon as possible. The instructor will work with you and Accessibility Services to plan and implement appropriate accommodations.
Course Schedule

UNIT I. EVALUATING OUR OWN LEARNING ABOUT FOOD SYSTEMS
- Why is it important to reflect on lessons learned through both coursework and field experiences?
- How can we make connections between theoretical concepts and "real world" experience in the food system?
- What are critical reflection and self-evaluation?
- How is evaluation used to assess our own learning and plan for the future?

Week 1 – Course introduction

Day 1: Introduction; Check in about internships

Assignment for next class:


Day 2: Critical reflections

In class activities:
- “Critique” examples from Chapter 1 in Ash and Clayton.
- Create an e-portfolio account: https://hostos.digication.com

Assignment for next class:

Week 2 - Evaluating our own learning

Day 1: Taking field notes to document our experiences

In class activities:
- Create a "field notes" document in Google docs or other software program that you will use to log your internship observations throughout the semester.
Assignment for next class:
- Type field notes about the first week of your internship, using the DEAL guidelines. Portions of the field notes will be for your own use, but you will be required to show evidence of field notes throughout the semester.

Day 2: Practicing the DEAL model

Assignment for next class:
- Critical reflection #1.

UNIT II. (RE)EXAMINING FOOD SYSTEMS DYNAMICS

This unit addresses the following overarching questions:

- Drawing from course work in Food Studies and other learning experiences, what are the key food systems challenges that we face in New York City, regionally, nationally, and globally?
- How has understanding food systems concepts and theories helped us reconsider challenges that we experience on a day-to-day basis?
- How do field-based experiences such as internships help us understand food systems challenges and opportunities?

Week 3 – Key challenges in New York City’s food system
Due today: Critical reflection #1

Day 1: NYC's food system and key challenges of today

Assignment for next class:
- Identify one NYC food systems issue that relates to your internship that has been covered in the New York Times within the past 12 months. Read the article and prepare an informal presentation about the key points, any points that the article overlooks, and, drawing from food studies concepts, how this intersects with your internship. You will present this to your peers in class next time.

Day 2: Workshop: Connecting NYC food systems issues to your internship

Assignment for next class:
- Internship field notes
Week 4 – Regional food systems and their connection to NYC

Day 1: Regional food systems challenges (Seminar/discussion)

Assignment for next class:

- Identify one regional food systems issue that relates to your internship that has been covered in the New York Times within the past 12 months. Read the article and prepare an informal presentation about the key points, any points that the article overlooks, and, drawing from food studies concepts, how this intersects with your internship. You will present this to your peers in class next time.

Day 2: Workshop: Connecting regional food systems issues to your internship

Assignment for next class:

- Internship field notes

Week 5 – Food systems at a global scale

Day 1: Food systems at a global scale (Seminar/discussion)

Assignment for next class:

- Identify one global food systems issue that relates to your internship that has been covered in the New York Times within the past 12 months. Read the article and prepare an informal presentation about the key points, any points that the article overlooks, and, drawing from food studies concepts, how this intersects with your internship. You will present this to your peers in class next time.

Day 2: Workshop: Connecting global food systems issues to your internship

Assignment for next class:

- Internship field notes
- Critical reflection #2

Week 6 – Food and the Environment

Due today: Critical reflection #2

Day 1: Guest speaker
Assignment for next class:

- Prepare all materials to upload to your e-portfolio. This includes your resume, references, cover letter(s), and other materials. We will work on portfolios in class next week.

Day 2: Workshop: populating your e-portfolio and 6-week internship check in.

Assignment for next class:
- Internship field notes
- Draft paper

Week 7 – Food and Health
Due today: Draft paper (emailed to professor and your peer review partner)

Day 1: Guest speaker

Assignment for next class:

- Prepare 3 distinct summarizing points about what you have learned about food, health, and environment through your course work, guest speakers, and internship, if applicable. Submit these via email prior to class next time and bring a copy to use for our in-class discussion.

Day 2: In-class reflection activity: What have we learned about food, health, and environment?

Assignment for next class:
- Internship field notes

Week 8 – Food Policy

Day 1: Guest speaker

Assignment for next class:

- Read your peer review partner’s paper for in-class workshop next time.

Day 2: Workshop – Peer critiques of draft paper

Assignment for next class:
- Internship field notes
UNIT III - FOOD SYSTEMS CHALLENGES AS OPPORTUNITIES

This unit addresses the following overarching questions:

- How can we reframe food systems challenges as opportunities at multiple scales?
- What opportunities exist for future employment in the food sector?
- What are some potential opportunities that Food Studies graduates might create?

Week 9 – Food Advocacy and Activism

Day 1: Guest speaker

Assignment for next class:

- Prepare 3 distinct summarizing points about what you have learned about food, policy, advocacy, and activism through your course work, guest speakers, and internship, if applicable. Submit these via email prior to class next time and bring a copy to use for our in-class discussion.

Day 2: In-class reflection: What have we learned about food policy, advocacy, and activism?

Assignment for next class:

- Internship field notes

Week 10— Innovation and entrepreneurship for Good Food

Day 1: What have we learned about innovation and entrepreneurship? Connecting conceptual and field-based learning (Seminar and discussion)

Assignment for next class:

- Prepare comments for in-class peer review

Day 2: Workshop: In-class peer review of draft paper

Assignment for next class:

- Internship field notes
- Critical reflection #3
Week 11 — Jobs and Good Food Jobs
Due today: Critical reflection #3

Day 1: Guest speaker [Workforce development]

Assignment for next class:
- Prepare remaining content for your e-Portfolio

Day 2: Workshop: Updating and maintaining your e-Portfolio

Assignment for next class:
- Work on final paper

Week 12 — Why study food...and what happens next?

Day 1: Assessing the Food Studies program: What have we learned, and what do we need to learn?

Assignment for next class:
- Work on final paper

Day 2: Workshop: Preparing a professional presentation about your work

Assignment for next class:
- Finish final paper

Week 13 — Maintaining professional connections for future opportunities
Due today: final paper

Day 1: Maintaining professional contacts: Keeping in touch with mentors, former employers, and your alma mater

Assignment for next class:
- TBD

Day 2: Workshop: Writing thank you letters to internship mentors

Assignment for next class:
- Work on final presentation

Week 14 — Workshop/Final Presentations 1 [Attendance required of all students]

Day 1: Workshop: Finalize/practice presentations

Assignment for next class:
- Practice final presentation
Day 2: Final presentations – session 1 of 2

*Assignment for next class:*
   * Practice final presentation

Week 15 – Final presentations 2 | Attendance required of all students|

Day 1: Final presentations – session 2 of 2
Overview of assignments:

Internship field notes (each week)
Using guidelines provided by the instructor and included in the course book, students keep an online log of weekly experiences in the required Food Studies internship. The field notes provide preliminary material for three critical reflection assignments throughout the semester.

e-Portfolio
With instructor guidance, students create an online e-Portfolio through the College portal (https://hostos.digitization.com). The e-Portfolio includes, at minimum, a resume, cover letter, list of professional references, and personal career statement (all of which will have been developed in the prior semester’s Food Studies Career Practices course).

Critical reflections (3)
Using guidelines and the DEAL (Describe, Examine, Articulate Learning) model described in the course book, students write three critical reflections about what they have learned through their internship experience. The DEAL model guides students in evaluating their own learning through field-based experiences.

Draft paper
Students prepare a draft version of their final paper (described below), which is submitted to the instructor and emailed to their peer review partner for in-class critique.

Final paper
Students prepare a final 5-10 page paper that builds on the critical reflection assignments to articulate learning through her/his Food Studies internship. The paper should draw connections between the internship and Food Studies course work, and, if applicable, the student’s future career and/or academic goals.

Final presentation
Students prepare a final presentation about their internship experience and their overall experience as Food Studies majors to present before their classmates, program faculty, and additional guests (e.g., internship mentors).
BIO 250 Botany

Pre-requisite: BIO210 and/or CHE210
4 credits, 6 hours (3 lecture, 3 lab)

Course Description

The course is designed to introduce students to the world of plants and their importance for humanity. Topics include botanical classification, morphology, anatomy, physiology, reproduction and phytogeography of plants commonly known and commercialized. It emphasizes plants as sources of food and medicine, as well as their history of domestication, nutritional value, propagation and cultivation. Urban repositories of botanical knowledge (botanical gardens, community gardens, rooftop gardens, vertical gardens, and hydroponic gardens) are discussed as novel adaptations to life in urban settings. Social implications associated with contemporary crop production, cultural traditions and personal choices are also analyzed.

Course textbooks

Lecture:

Laboratory manual:

Additional Resources:

LECTURE

<table>
<thead>
<tr>
<th>Week</th>
<th>Topics</th>
<th>Required reading</th>
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<tbody>
<tr>
<td>Week 1</td>
<td>Plants in our world</td>
<td>Plants in our world</td>
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<tr>
<td></td>
<td>What are plants?</td>
<td>Ch.1 p1-19</td>
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<td>Flowering plants and non-flowering plants</td>
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<tr>
<td></td>
<td>• How do monocots and dicots organ differ?</td>
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<td>• The plant body: What is the function of each organ?</td>
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<td>Plant life cycle - Flowers, Fruits and Seeds</td>
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<td>Week 2</td>
<td>Plant physiology</td>
<td>Levetin &amp; McMahon Plants and Society</td>
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<td></td>
<td>Metabolism, photosynthesis, cellular respiration</td>
<td>Ch.3 p49-69</td>
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<td></td>
<td>• How do plants work?</td>
<td>• Handout</td>
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<td></td>
<td>• What do plants need to grow and develop?</td>
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</tbody>
</table>
| Week 3 | **Human Nutrition**  
- Macronutrients and Micronutrients.  
- Dietary guidelines  
- Why are plants important in human nutrition? | Levetin & McMahon *Plants and Society*  
Ch.10 p156-176  
- Handout |
|-------|-------------------------------------------------|-----------------------------------------------|
| Week 4 | **FIRST PARTIAL EXAM**  
**Origins of agriculture: The cradle of agriculture**  
- Time frame  
- Myths and traditions  
- Where were crops domesticated? | Plants in our world  
Ch.2 p22-31 |
| Week 5 | **Human manipulation of plants**  
- Sexual reproduction  
- Asexual reproduction  
- Gene alteration  
- Beyond traditional methods of propagation | Plants in our world  
Ch.3 p36-48 |
| Week 6 | **Fruits and nuts of temperate and tropical regions**  
- What is a fruit?  
- Fruit types  
- Domesticated species: apples, pears, olives, kiwi, berries, tomatoes, peppers, oranges, avocados, bananas, mangoes, pineapple other fruits and nuts | Plants in our world  
Ch.4 p51-71  
Ch.5 p77-108 |
| Week 7 | **SECOND PARTIAL EXAM**  
**The grass family: Old world and New World grains and cereals**  
- Botanical characteristics suitable for domestication  
- Modern cultivars and nutrition  
- Domesticated species: corn, wheat, rice, and other grains and pseudo-cereals | Plants in our world  
Ch.6 p114-133  
Ch.7 p134-147 |
| Week 8 | **The bean family: Fabaceae – Legumes**  
- Botanical characteristics suitable for domestication  
- Modern cultivars and nutrition  
- Domesticated species: peas, beans, peanuts, soybeans and other legumes  
- Legumes for animal feed | Plants in our world  
Ch.8 p150-69 |
| Week 9 | **THIRD PARTIAL EXAM**  
**Foods from stems and leaves – vegetables**  
- Annual and biannual crops  
- Leafy crops  
- Perennial vegetables | Plants in our world  
Ch.9 p172-188 |
| Week 10 | **Tubers and Rhizomes – food from roots and stems – starchy staples**  
|         | - Botanical characteristics of starch storing organs  
|         | - Nutritional value  
|         | - Domesticated species: white potato, sweet potato, cassava, and other staples  
|         | - Cultivation and processing | Plants in our world  
|         | Ch.10 p192-214 |
| Week 11 | **Vegetable oils – saturated and unsaturated fats**  
|         | - Fats and oils stored in plants  
|         | - Fats in processed food  
|         | - Oil extraction  
|         | - Oil sources: linseed, safflower, soybean, corn, sunflower, canola, and other oils | Plants in our world  
|         | Ch.11 p216-239 |
| Week 12 | **FOURTH PARTIAL EXAM** |
|         | **Feeding a hungry world – Plant breeding and crop improvement programs**  
|         | - The Green Revolution  
|         | - Genetic diversity of crops  
|         | - New crops  
|         | - Biotechnology | Levetin & McMahon. *Plants and Society*  
|         | Ch.15 p235-249  
|         | - Handout |
| Week 13 | **Ornamental plants**  
|         | Gardening styles  
|         | Parks, botanical gardens  
|         | Major groups of ornamental plants  
|         | Ornamental plants and recreational areas  
|         | - Parks  
|         | - Botanical gardens  
|         | - Trees used in landscape design and ornamental plants | Plants in our world  
|         | Ch.20 p443-465 |
| Week 14 | **Future trends**  
|         | - Global food supplies  
|         | - Biodiversity  
|         | - Food and Health  
|         | Urban agriculture, Urban farms, Community gardens, Agricultural innovations in urban areas: Green roofs, Vertical gardens, Hydroponic crops, Pot plants and terrariums  
|         | Urban markets: Ethnic markets, Farmers’ markets, Botanicas | Plants in our world  
|         | Ch.21 p472-489  
|         | and handouts |
| Week 15 | **FINAL EXAM - CUMULATIVE** |
## LAB SCHEDULE

<table>
<thead>
<tr>
<th>Week</th>
<th>Topics</th>
<th>Lab Book</th>
<th>Reports due date</th>
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<tbody>
<tr>
<td>Week 1</td>
<td>Introduction to plant cells and cell inclusions</td>
<td>TBD</td>
<td>After lab completion</td>
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<td>Identification of:</td>
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<td>• Raphides</td>
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<td>• Druse</td>
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<td>• Plastids</td>
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<td>• Pigments</td>
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<td>Week 2</td>
<td>Introduction to Composting</td>
<td>TBD</td>
<td>After lab completion</td>
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<td></td>
<td>• What is composting?</td>
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<td>• Composting techniques</td>
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<td><strong>Experimental design 1</strong></td>
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<td></td>
<td>• Set up compost experiment</td>
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<td>• Observe progress weekly – annotate observations</td>
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<td>Week 3</td>
<td>Vegetative organs and reproductive organs</td>
<td>TBD</td>
<td>After lab completion</td>
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<td></td>
<td>• Morphology and function of roots, stems and leaves</td>
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<td></td>
<td>• The Root: Structure and Development</td>
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<td>• The Shoot: Primary Structure and Development</td>
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<td>• Flowers and Fruits</td>
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<td>Week 4</td>
<td>Plant physiology: Photosynthesis, transpiration, guttation</td>
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<td>• Primary Metabolism: Photosynthesis, Light, and Life</td>
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<td>• Light Reaction, Dark Reaction, C3, C4 and CAM</td>
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<td>• Growth and development: hormones</td>
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<td>• Regulating Growth and Development: Plant Hormones</td>
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<td><strong>Experimental design 2</strong></td>
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<td>• Set an hydroponic experiment to observe plant growth</td>
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<td>• Observe progress in one week – annotate observations</td>
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<td>Week 5</td>
<td>Fruits of temperate and tropical regions</td>
<td>TBD</td>
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<td>• Dissection of fruit samples</td>
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<td>• Determination of fruit type</td>
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<td>• Identification of structures</td>
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<td>• Add scraps to composting tumbler</td>
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<td>Week 6</td>
<td>Organically grown crops and genetically modified foods</td>
<td>TBD</td>
<td>After lab completion</td>
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<td></td>
<td>• Identification of GMO</td>
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<td>• Analysis by gel electrophoresis</td>
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<td>• Continuation of composting practice</td>
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<td>Week 7</td>
<td>Nutrients of plant origin</td>
<td>TBD</td>
<td>After lab completion</td>
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<td>- Test for organic molecules</td>
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<td>- Testing plant based food samples</td>
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<td>- Select plant based products and test for organic molecules</td>
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<td>- Collect and analyze data in class</td>
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<tr>
<th>Week 8</th>
<th>FIRST LAB EXAM</th>
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<tr>
<td>Week 9</td>
<td>Fieldtrip 1</td>
<td>TBD</td>
<td>After lab completion</td>
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<tr>
<td></td>
<td>Urban agricultural practices (one option)</td>
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<td></td>
<td>- Rooftop gardening</td>
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<td>- Vertical gardens</td>
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<td></td>
<td>- Hydroponics</td>
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<td>- Seed planting in hydroponic chamber</td>
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| Week 10  | Grasses and tubers       | TBD       | Report of experiment 1 Composting |
|          | - Identification of source plants |   |                      |
|          | - Morphological descriptions |   |                      |
|          | - Analysis of nutrient content |   |                      |
|          | - Continuation of composting practices |   |                      |

| Week 11  | Legumes and Oils         | TBD       | After lab completion |
|          | - Identification of source plants |   |                      |
|          | - Morphological descriptions |   |                      |
|          | - Analysis of nutrient content |   |                      |
|          | - Continuation of composting practices |   |                      |

| Week 12  | Fieldtrip 2              | TBD       | Reports Fieldtrip 1 and Fieldtrip 2 |
|          | Urban agricultural practices (one option) |   |                      |
|          | - Community garden       |           |                      |
|          | - Ethnic market          |           |                      |
|          | - Supermarket botany     |           |                      |

| Week 13  | Harvest of hydroponic crops | TBD       | Report of experiment 2 Hydroponic growth |
|          | Collection of compost soil |           |                      |

| Week 14  | PRESENTATION OF RESEARCH PROJECTS          | TBD       |                      |
|          | Date to be determined by Earth Day Celebration in the spring and Science Day in the fall |   |                      |

| Week 15  | SECOND LAB EXAM                     |           |                      |
BIO270 Food Microbiology

Pre-requisite: BIO210 and/or CHE210
4 credits, 6 hours (3 lecture; 3 lab)

Course Description
This course is designed to introduce students to general principles of microbiology with an emphasis on structure, function and growth control of microorganisms important in food processing, food spoilage, and in causing food-borne illnesses. General microbiology topics covered in this course include structure and function of eukaryotic and prokaryotic cells, metabolism, growth of bacterial culture, pathogenic properties of microorganisms, and interaction between microbe and host. Food microbiology topics covered in this course include lactic acid bacteria and their fermentation products, spoilage microorganisms and control of their growth in food, foodborne pathogenic bacteria and control of their growth in food, and methods of identification and quantification of microorganisms in food.

Course textbooks

Lecture Required
Food Microbiology an Introduction Mentville T.J., Matthews, K.R., and Kriel J.E.

Laboratory
Microbiology Laboratory Theory and Application. Leboffe, Michael J., and Pierce, Burton F.

Additional Resources:
Campbell Biology any edition published after 2012 (students have this book from their BIO210/220 courses)

Schedule of Classes

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<tr>
<th>Week</th>
<th>Topic</th>
<th>Assignment/Exercise</th>
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<tbody>
<tr>
<td>1</td>
<td>Lecture</td>
<td>Reading:</td>
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<tr>
<td></td>
<td>Introduction to Microbiology</td>
<td>Mentville:</td>
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<td></td>
<td>Food Microbiology is a specialized field of Microbiology</td>
<td>Ch. 1. The trajectory of food microbiology.</td>
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<td>Laboratory</td>
<td>Reading and Exercise:</td>
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<td>Introduction to Microbiology laboratory and safety rules. Aseptic techniques. Common transfer and inoculation methods.</td>
<td>Leboffe:</td>
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<td>Ex. 1-3 Common aseptic transfer and inoculation methods</td>
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<td>Ex. 1-4 Streak Plate method of isolation</td>
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<td>Outline: Leboffe, Ex. 7-7 Methylene Blue reductase test</td>
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<td>2</td>
<td>Lecture: Introduction to Metabolism</td>
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<td>Ch. 6. An introduction to metabolism</td>
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<td>Chapter 2 (pp. 39-42) Microbial Physiology and metabolism</td>
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<td>Outline: Leboffe, Ex. 5-3 Methyl Red and Voges-Proskauer Test,</td>
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<td>and Ex. 5-1 (O1 Glucose test)</td>
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<tr>
<th>3</th>
<th>Lecture: Metabolism/lactic acid and yeast-based fermentation</th>
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<td></td>
<td>Montville: Ch. 19. Lactic acid bacteria and their fermentation products. Ch. 20 Fermentation that uses yeast.</td>
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<td>Laboratory: Monitoring yogurt preparation. Differentiation between oxidation and fermentation pathways of microbial metabolism. Differentiation between acidic versus non-acidic fermentation.</td>
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<td>Exercise: Monitoring yogurt preparation (handout). Setting up 5-3 (Methyl Red and Voges-Proskauer Test). Ex. 5-1 (O/F Glucose). Homework: Outlines: Leboffe, Ex. 3-1 (Simple stain), Ex. 3-6 (Gram stain).</td>
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<th>4</th>
<th>Lecture: Structure of Prokaryotic and Eukaryotic cell</th>
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<tr>
<td></td>
<td>Reading: Campbell: Ch. 7. A tour of a cell</td>
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<td>Laboratory: Introduction to Light Microscopy. Differential staining to reveal structure of bacterial cell wall (Gram stain).</td>
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<td>Exercise: Assessment of Methyl Red/Voges-Proskauer and O/F Glucose tests Ex. 3-6 (Gram stain). Homework: Laboratory report 2: Methyl Red/Voges-Proskauer and O/F Glucose tests Outline: Leboffe, Ex. 3-9 (Endospore staining).</td>
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<th>5</th>
<th>Lecture: Spores and their significance in food industry</th>
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<td>Reading: Montville: Ch. 3. Spores and their significance.</td>
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<td>Laboratory: Differential staining to reveal spores (Endospore staining).</td>
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<td>Exercise: Leboffe: Ex. 3-9 (Endospore staining). Homework: Laboratory report 3: Gram staining and Endospore staining Outline: Leboffe Ex. 2-8 (Effect of temperature on microbial growth). Ex. 2-9 (Effect of pH on Microbial Growth) Ex. 2-10 (Effect of osmotic pressure on Microbial Growth).</td>
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<th>6</th>
<th>Lecture: Microbial growth and factors that influence microbial growth.</th>
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<td>Reading: Handout &quot;Microbial Growth&quot; Montville: Ch. 2. Microbial Growth, Survival and Death in Foods</td>
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<td>Laboratory: Using hemocytometer to determine cell density.</td>
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<td>Exercise Using hemocytometer to determine cell density (handout) Exercise setting up: Leboffe Ex. 2-8 (Effect of temperature on microbial growth). Ex. 2-9 (Effect of pH on Microbial Growth) Ex. 2-10 (Effect of osmotic pressure on Microbial Growth).</td>
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<th>7</th>
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<td>Reading: Handout: Control of microorganisms growth Montville: Ch. 25. Control of Microorganisms in food.</td>
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**Laboratory Exam 1: Staining and metabolic tests.**
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<th>Lecture</th>
<th>Exercise</th>
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<td>Laboratory: Effect of Temperature, pH, Osmotic pressure on bacterial growth.</td>
<td>Assessment of the effects of temperature, pH and osmotic pressure on microbial growth. (hemoctometer use)</td>
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<td>Homework: Laboratory report 4: effect of environmental conditions on bacterial growth.</td>
<td>Outline: Leboffe Ex. 2-12 Chemical Germicides</td>
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<thead>
<tr>
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<tr>
<td>Epidemiology of food-borne illnesses.</td>
<td>Montville: Handout: Introduction to epidemiology Ch. 7 Regulatory issues [in food preparation]</td>
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<th>Cell structure and bacterial growth</th>
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<td>Laboratory: Effect antimicrobial agents on bacterial growth.</td>
<td>Setting up: Leboffe Ex. 2-12 Chemical Germicides</td>
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<td>Outline: Leboffe: Ex. 4-1 Mannitol-salt Agar, Ex 4-3 Blood Agar, 5-4 Catalase test</td>
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<td>Lecture</td>
<td>Staphylococcus aureus, Vibrio species.</td>
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<td>Montville Ch. 16 Staphylococcus aureus, Ch. 17 Vibrio species</td>
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<td>Differential tests</td>
<td>Assessment of the Chemical Germicides test 5-4 Catalase test</td>
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<td>Setting up: Ex. 4-1 Mannitol-salt Agar, Ex 4-3 Blood Agar</td>
<td>Homework Laboratory report 5: Effectiveness of different germicides. Outline: Leboffe: Ex. 4-5 Hektoen Agar, Ex. 4-6 MacConkey Agar</td>
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<td>Montville Ch. 12 Escherichia coli, Ch. 14 Salmonella species, Ch. 15 Shigella species</td>
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<td>Assessment of bacterial growth on Hektoen Agar and MacConkey Agar.</td>
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<td>Homework Laboratory report 7 Identification of enterobacteria-1</td>
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<th>Listeria monocytogenes and Yersinia enterocolitica</th>
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<td>Montville</td>
<td>Ch. 13 Listeria monocytogenes and Ch. 18 Yersinia enterocolitica</td>
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### Lecture exam 3. Host/pathogen relationship

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<td><strong>Lecture</strong></td>
<td>Spoilage organisms McCloud Ch. 21 Spoilage Microorganisms</td>
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<td><strong>Laboratory</strong></td>
<td>Microbiological analysis of food samples Handout “Sample preparation and PCR set up”. Homework: Handout “Analysis of PCR results”</td>
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### Laboratory exam 3. Differential tests

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<th>Lecture</th>
<th>Yeast and Molds Montville Ch. 20 Yeast-based and other fermentation; Ch. 22 Molds</th>
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<td><strong>Laboratory</strong></td>
<td>Microbiological analysis of food samples Analysis of PCR results by agarose gel electrophoresis. Preparation of an agarose gel to resolve PCR products, gel electrophoresis, obtaining image of gel electrophoresis.</td>
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#### Laboratory

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#### Deadlines for laboratory reports submission

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<td>Methylene blue reductase test</td>
<td>Week 3</td>
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<td>2</td>
<td>Medvii Red/Voges-Preskauer and O/F Glucose tests</td>
<td>Week 5</td>
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<td>3</td>
<td>Gram staining and Endospore Staining</td>
<td>Week 6</td>
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<td>4</td>
<td>Effect of environmental conditions on bacterial growth</td>
<td>Week 8</td>
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<td>5</td>
<td>Effectiveness of different germicidal agents</td>
<td>Week 10</td>
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<tr>
<td>6</td>
<td>Identification and differentiation of Staphylococcus spp.</td>
<td>Week 11</td>
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<td>7</td>
<td>Identification of enterobacteria-I</td>
<td>Week 12</td>
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<tr>
<td>8</td>
<td>Identification of enterobacteria-II</td>
<td>Week 13</td>
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#### Schedule of lecture examinations.

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<th>Exam</th>
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<td>1</td>
<td>Metabolism</td>
<td>Week 4</td>
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<tr>
<td>2</td>
<td>Cell structure and bacterial growth</td>
<td>Week 8</td>
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<td>3</td>
<td>Host/pathogen relationship.</td>
<td>Week 12</td>
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<td>4</td>
<td>Final examination - cumulative</td>
<td>Week 15</td>
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#### Schedule of laboratory examinations.

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<th>Exam</th>
<th>Topic</th>
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<tr>
<td>1</td>
<td>Staining and metabolic tests</td>
<td>Week 6</td>
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<tr>
<td>2</td>
<td>Growth of bacterial culture and its control</td>
<td>Week 9</td>
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<tr>
<td>3</td>
<td>Differential tests</td>
<td>Week 13</td>
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<td>4</td>
<td>Final examination - cumulative</td>
<td>Week 14</td>
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<td><strong>English Composition</strong></td>
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<td><strong>English Literature &amp; Composition</strong></td>
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<td><strong>Quantitative Reasoning</strong></td>
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<td><strong>Life &amp; Physical Sciences</strong></td>
<td>BIO 110 or BIO 210</td>
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<td><strong>Flexible Core</strong></td>
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<tr>
<td><strong>World Cultures &amp; Global Issues</strong></td>
<td>ANTH 101 LLS 101 or HLS 201</td>
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<td><strong>US Experience &amp; Diversity</strong></td>
<td>LAC 101, WGS 100 or LLS 114</td>
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<td>PSY 101, ENG 223 or PSY 120 or SOC 101</td>
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<td>BIO 120 or BIO 130 or BIO 210 or CHE 210 or CHE 220</td>
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| **Sub Total** | 30-32 |

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<tr>
<td><strong>Food Studies II: Food, Environment and Justice</strong></td>
<td>FS 120</td>
<td>3</td>
<td>FS 101; BIO 110 or 210</td>
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<td><strong>Food, Policy, and Advocacy</strong></td>
<td>FS 200</td>
<td>3</td>
<td>FS 101; FS 120</td>
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<tr>
<td><strong>Food, Health and Environment</strong></td>
<td>FS 220</td>
<td>3</td>
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<td><strong>Food Studies Career Practices</strong></td>
<td>FS 225</td>
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<td>FS 230</td>
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| **Sub Total** | 16 |

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<td>Social Problems of Minority Communities</td>
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Students may complete the Associates in Arts with a Food Studies concentration by completing the 16 credit sequence under the elective option of the degree.
Appendix C
Students may choose three courses (9-12 credit) from four tracks — Food Policy, Social Issues, Health & Nutrition and Environmental & Sustainability.

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<td>1.5</td>
<td>Pre-sep Sci 40</td>
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</tbody>
</table>

Students may choose three courses (9-12 credits) from four tracks - Food Policy, Social Issues, Health & Nutrition, and Environment & Sustainability.

*The credit range is required for students who opt for the Environment and Sustainability track, which requires STEM courses. Students who opt for an alternate track may choose additional elective credits.*
<table>
<thead>
<tr>
<th>Elective 5 Other 0-5</th>
<th>MARCH 25-28</th>
<th>Liberal Arts &amp; Sciences 30</th>
<th>Credits: 60-61</th>
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<tr>
<td>ECE 320 (Computer Programming Fundamentals)</td>
<td>3</td>
<td>ENG 110</td>
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</tr>
<tr>
<td>ENG 110 (Second Language)</td>
<td>3</td>
<td>ANTH 101 (World Civilizations Europe)</td>
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<td>All Food Studies core</td>
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<td>ENGL 120 (Literature and Composition)</td>
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<tr>
<td>Course Code</td>
<td>Course Title</td>
<td>Description</td>
<td></td>
</tr>
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<td>-------------</td>
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<td>-------------</td>
<td></td>
</tr>
<tr>
<td>ENGL 101</td>
<td>English Composition I</td>
<td>Introduction to English Language and Literature</td>
<td></td>
</tr>
<tr>
<td>ENGL 102</td>
<td>English Composition II</td>
<td>Advanced Writing and Literature</td>
<td></td>
</tr>
<tr>
<td>ENGL 201</td>
<td>Survey of World Literature</td>
<td>Historical and Cultural Perspectives of World Literature</td>
<td></td>
</tr>
<tr>
<td>ENGL 202</td>
<td>American Literature</td>
<td>American History and Cultural Heritage</td>
<td></td>
</tr>
<tr>
<td>ENGL 203</td>
<td>Shakespeare</td>
<td>A New Reading of the Bard</td>
<td></td>
</tr>
<tr>
<td>ENGL 204</td>
<td>American Fiction</td>
<td>American Literature and Society</td>
<td></td>
</tr>
<tr>
<td>ENGL 301</td>
<td>Advanced English</td>
<td>Advanced Study of English Language and Literature</td>
<td></td>
</tr>
<tr>
<td>ENGL 302</td>
<td>American Literature</td>
<td>American Literature and Society</td>
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<tr>
<td>ENGL 303</td>
<td>Shakespeare</td>
<td>A New Reading of the Bard</td>
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<tr>
<td>ENGL 304</td>
<td>American Fiction</td>
<td>American Literature and Society</td>
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<tr>
<td>ENGL 401</td>
<td>Special Topics in English</td>
<td>Special Topics in English Language and Literature</td>
<td></td>
</tr>
</tbody>
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*Some courses may have prerequisites that are not listed.*
Students may choose three courses (9-12 credits) from four tracks - Food Policy, Social Issues, Health & Nutrition, and Environmental & Sustainability.

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
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<td>1311</td>
<td>Integrated Study in Food Science</td>
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</tr>
<tr>
<td>1312</td>
<td>Independent Study in Food Science</td>
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<td>Course Number 1 (Food Science)</td>
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<td>Course Number 2 (Food Science)</td>
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<td>1317</td>
<td>Course Number 3 (Food Science)</td>
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This course is designed for students who opt for the Environmental and Sustainability track, which requires STEM courses. Students who opt for an alternative track may have additional elective credits.
<table>
<thead>
<tr>
<th>Program Courses to be Taught</th>
<th>Faculty Member Name and Title</th>
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</thead>
<tbody>
<tr>
<td>BIO 250 Ecology of Food</td>
<td>Former Professor (Good)</td>
</tr>
<tr>
<td>BIO 210 General Biology</td>
<td>Associate Professor</td>
</tr>
<tr>
<td>BIO 120 Plants &amp; Society</td>
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</tbody>
</table>

**Table 2: Full-Time Faculty**

*Educational Leadership and Policy Education programs may provide additional directions for those seeking professional leadership roles and who wish to be an influential and effective leader in the field of educational leadership. The application approach for a professional license involves a comprehensive social capital examination in the field. Please provide information on faculty members with a focus on social capital.*

**Additional Qualifications:**
- Professional experience in educational leadership
- Leadership roles in educational organizations
- Knowledgeable in educational policy and practice

**Current and Former Faculty:**
- E. Johnson (2012-2017)
- M. A. Williams (2015-2019)
- T. Smith (2019-2022)

**Additional Notes:**
- Include College/University
- Include College/University
- Include College/University

<table>
<thead>
<tr>
<th>Program</th>
<th>Parent Time to Be Taught</th>
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</thead>
<tbody>
<tr>
<td>BIO 250 Ecology of Food</td>
<td></td>
</tr>
<tr>
<td>BIO 210 General Biology</td>
<td></td>
</tr>
<tr>
<td>BIO 120 Plants &amp; Society</td>
<td></td>
</tr>
</tbody>
</table>

**Continued Education:**
- Conferences and Workshops
- Professional Development
- Graduate-level coursework

**Additional Qualifications:**
- Leadership in educational organizations
- Knowledgeable in educational policy and practice
- Comprehensive social capital examination
<table>
<thead>
<tr>
<th>Part Time Faculty</th>
<th>Name and Title</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
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</tbody>
</table>

<table>
<thead>
<tr>
<th>Additional Qualifications (include College/University)</th>
<th>Degrees &amp; Disciplines (include Highest and Other Applicable Earned)</th>
</tr>
</thead>
<tbody>
<tr>
<td>University of California, Davis</td>
<td>BS Environmental Soil and Crop Sciences</td>
</tr>
<tr>
<td>University of California, Davis</td>
<td>MS International Agricultural Development</td>
</tr>
<tr>
<td>Colorado State University</td>
<td>FS 10 Introduction to Food Studies</td>
</tr>
<tr>
<td>New York University</td>
<td>JD June College</td>
</tr>
<tr>
<td>NFA Political Science</td>
<td>PPA 10 Public Administration</td>
</tr>
<tr>
<td>Syracuse University</td>
<td>PPA 101 Public Administration</td>
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</table>

<table>
<thead>
<tr>
<th>Adjunct Assistant Professor</th>
<th>Assistant Professor</th>
<th>Associate Professor</th>
<th>Professor</th>
</tr>
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</table>

<table>
<thead>
<tr>
<th>Experience (Scholarly contributions, etc.)</th>
</tr>
</thead>
</table>
Appendix E
<table>
<thead>
<tr>
<th>Date Hire</th>
<th>Expected Date Hire</th>
<th>Expected Course Assignments</th>
<th>Percent Time</th>
<th>F/T or P/F</th>
<th>Position</th>
<th>Minimum Qualifications</th>
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<td>Fall 2015</td>
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<td>PS 223 Food Studies Career</td>
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<td>PS 101 Introduction to Food</td>
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</table>

If faculty is hired, specify the number and title of new positions to be established and minimum qualifications.
Appendix F
<table>
<thead>
<tr>
<th>Year</th>
<th>2023/24</th>
<th>2024/25</th>
<th>2025/26</th>
<th>2026/27</th>
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<tr>
<td>Year 3</td>
<td>2,755,000</td>
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<tr>
<td>Year 4</td>
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<td>3,700,000</td>
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<td>2,755,000</td>
<td>3,700,000</td>
<td>1,900,000</td>
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**Table 5: New Resources**
<table>
<thead>
<tr>
<th>Academic Year</th>
<th>1st Year</th>
<th>2nd Year</th>
<th>3rd Year</th>
<th>4th Year</th>
<th>5th Year</th>
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<tbody>
<tr>
<td>2018-2019</td>
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<td>2019-2020</td>
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<tr>
<td>2020-2021</td>
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<tr>
<td>2021-2022</td>
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</tr>
</tbody>
</table>

Table of Projected Revenue Related to the Proposed Program:

- **1. Total**
  - 01. From New Sources
  - 02. From Existing Sources
- **2. Revenue**
  - 03. Total
  - 04. From New Sources
  - 05. From Existing Sources
- **3. Revenue**
  - Grand Total
  - **TOTAL**
  - 06. From New Sources
  - 07. From Existing Sources
  - **TOTAL**
f to the next year as revenues from continuing sources with adjustments for inflation.
<table>
<thead>
<tr>
<th>Year</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
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<tbody>
<tr>
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<td>1</td>
<td>11,725</td>
<td>28,540</td>
<td>26,244</td>
<td>26,004</td>
<td>10,800</td>
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<tr>
<td>2</td>
<td>11,725</td>
<td>28,540</td>
<td>26,244</td>
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<td>$ 125,062.70</td>
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Total (Includes Full-Time Faculty on Program Expenditure)

Full Time Staff Salary (41.6%)  
Full Time Staff Base Salary (list separately)

Part Time Faculty Actual Faculty薪金 (24.3%)  
Part Time Faculty Actual Salaries

Total (Includes Full-Time Faculty on Program Expenditure)  
Full Time Employee fringe benefits (41.6%)  
New Faculty Re-assigned Time (list separately)

New Part Time Faculty Overhead (includes summer)  
New Full Time Faculty Base Salary (list separately)

Current Full Time Faculty Overhead (includes summer)  

The Five-Year Financial Projections for Program

DIRECT OPERATING EXPENSES
<table>
<thead>
<tr>
<th>Year</th>
<th>2020</th>
<th>2022</th>
<th>2024</th>
<th>2026</th>
<th>2028</th>
<th>2030</th>
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**Laboratories**

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<tr>
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<th>2022</th>
<th>2024</th>
<th>2026</th>
<th>2028</th>
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**Library**

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<th>2024</th>
<th>2026</th>
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**Part-Time Staff**

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<th></th>
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<th>2022</th>
<th>2024</th>
<th>2026</th>
<th>2028</th>
<th>2030</th>
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</table>

**Part Time Staff (not included in the line above)\**

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<tr>
<th></th>
<th>2020</th>
<th>2022</th>
<th>2024</th>
<th>2026</th>
<th>2028</th>
<th>2030</th>
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<th>2034</th>
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<tbody>
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<td>396.25</td>
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<td>16,800</td>
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<tr>
<td>Year 1</td>
<td>Year 2</td>
<td>Year 3</td>
<td>Year 4</td>
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</tr>
</tbody>
</table>

**Supplies and Expenses (OITPS):**
- Office Supplies
- Consultants and Contractors
- Instructional Supplies
- Membership Fees
- Travel and Conference
- Equipment Repair and Maintenance
- Software
- Acceleration
- Professional Development
- Facility Renovations
- Classroom Equipment
- Other (best separate)

**TOTAL (lines 1-9 Capital Exp. on Program Exp. Worksheet):**

**TOTAL (lines 1-9 Other expenses on Program Exp. Worksheet):**
<table>
<thead>
<tr>
<th>Year One</th>
<th>Year Two</th>
<th>Year Three</th>
<th>Year Four</th>
<th>Year Five</th>
</tr>
</thead>
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<td>$324,605</td>
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<td>$292,894</td>
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</table>

**Total Existing Full-Time Tuition Revenue:**

<table>
<thead>
<tr>
<th>Student Fees</th>
<th>Total Tuition</th>
<th>Total Fees</th>
</tr>
</thead>
<tbody>
<tr>
<td>$67.500</td>
<td>$216.000</td>
<td>$383.500</td>
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</table>

**Total In-State Tuition:**

<table>
<thead>
<tr>
<th>Student Fees</th>
<th>Total Tuition</th>
<th>Total Fees</th>
</tr>
</thead>
<tbody>
<tr>
<td>$67.500</td>
<td>$216.000</td>
<td>$383.500</td>
</tr>
</tbody>
</table>

**Total Out-of-State Tuition & Fees:**

<table>
<thead>
<tr>
<th>Student Fees</th>
<th>Total Tuition</th>
<th>Total Fees</th>
</tr>
</thead>
<tbody>
<tr>
<td>$67.500</td>
<td>$216.000</td>
<td>$383.500</td>
</tr>
</tbody>
</table>

**Additional Notes:**

- Tuition Income (Simplified): 22% increase for Year 2015.
- Community College Worksheet:
  - Five-Year Revenue Projections for Program.
<table>
<thead>
<tr>
<th>Year One</th>
<th>Year Two</th>
<th>Year Three</th>
<th>Year Four</th>
<th>Year Five</th>
</tr>
</thead>
<tbody>
<tr>
<td>$933.12</td>
<td>$76.07</td>
<td>$74.47</td>
<td>$58.08</td>
<td>$48.12</td>
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<tr>
<td>$0</td>
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<tr>
<td>$0</td>
<td>$0</td>
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<td>$0</td>
</tr>
<tr>
<td>$324</td>
<td>$311</td>
<td>$305</td>
<td>$300</td>
<td>$224</td>
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<tr>
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<tr>
<td>$65</td>
<td>$15</td>
<td>$15</td>
<td>$15</td>
<td>$15</td>
</tr>
</tbody>
</table>

Total Full-Time Students

Total Existing Part-Time Students

Total Out-of-State Tuition & Fees

Total Fees

Student Fees (non-annual program fees other than standard CUNY)

Total Tuition

Fees

Total Income (special fees, per credit, calculated by program

Spring/Summer - 6 hours; Fall/Spring - 12 hours)

Total Enrolled Credits (enter any full-time student per year)

Total Out-of-State, In-State, & International Students (entered below)

# of Full-Time, In-State Students

# of Part-Time, In-State Students

# of Full-Time, Out-of-State Students

# of Part-Time, Out-of-State Students

# of Part-Time, International Students

# of Part-Time, International Students
<table>
<thead>
<tr>
<th></th>
<th>$331,097</th>
<th>$332,460</th>
<th>$332,400</th>
<th>$322,400</th>
<th>$332,000</th>
<th>$377,500</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total Out-of-State Tuition &amp; Fees</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Total Fees</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Student Fees</td>
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<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
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<tr>
<td>Total Tuition</td>
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<td>0</td>
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<td>0</td>
<td>0</td>
<td>0</td>
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<tr>
<td>After Fall 2015</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Tuition Income</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Annual AVG # of Credits per FT Student (24-30)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td># of New Full-Time Out-of-State Students (Linked from # of Tuition &amp; Fees)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total In-State Tuition &amp; Fees</td>
<td>$331,097</td>
<td>$332,460</td>
<td>$332,400</td>
<td>$322,400</td>
<td>$332,000</td>
<td>$377,500</td>
</tr>
<tr>
<td>Total Fees</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Student Fees</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Total Tuition</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>After Fall 2015</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Tuition Income</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Annual AVG # of Credits per FT Student (24-30)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td># of New Full-Time In-State Students (Linked from Total In-State Tuition &amp; Fees)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Fees:
- $67,500
- $66,000
- $67,500
- $4,994
- $800
- $15

Note: The table reflects tuition and fees information for different academic years and student status.
<table>
<thead>
<tr>
<th>Year</th>
<th>Year One</th>
<th>Year Two</th>
<th>Year Three</th>
<th>Year Four</th>
<th>Year Five</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total Fees (Tuition &amp; Fees)</td>
<td>$400,000</td>
<td>$500,000</td>
<td>$600,000</td>
<td>$700,000</td>
<td>$800,000</td>
</tr>
<tr>
<td>Student Fees (Specialty Fee per credit calculated)</td>
<td>$30 per credit</td>
<td>$30 per credit</td>
<td>$30 per credit</td>
<td>$30 per credit</td>
<td>$30 per credit</td>
</tr>
<tr>
<td>Total Tuition Income (Specialty Fee per credit calculated)</td>
<td>$30 per credit</td>
<td>$30 per credit</td>
<td>$30 per credit</td>
<td>$30 per credit</td>
<td>$30 per credit</td>
</tr>
<tr>
<td>Total Enrollment Credits (Students per credit calculated per year)</td>
<td>150 credits</td>
<td>150 credits</td>
<td>150 credits</td>
<td>150 credits</td>
<td>150 credits</td>
</tr>
</tbody>
</table>

**Year One**
- Total Fees (Tuition & Fees): $400,000
- Enrollment Credits: 180 students

**Year Two**
- Total Fees (Tuition & Fees): $500,000
- Enrollment Credits: 190 students

**Year Three**
- Total Fees (Tuition & Fees): $600,000
- Enrollment Credits: 200 students

**Year Four**
- Total Fees (Tuition & Fees): $700,000
- Enrollment Credits: 210 students

**Year Five**
- Total Fees (Tuition & Fees): $800,000
- Enrollment Credits: 220 students

**Total New Part-Time Students**

**Total Out-of-State Tuition & Fees**

**Total In-State Tuition & Fees**
<table>
<thead>
<tr>
<th>Year Five</th>
<th>Year Four</th>
<th>Year Three</th>
<th>Year Two</th>
<th>Year One</th>
</tr>
</thead>
<tbody>
<tr>
<td>$193.760</td>
<td>$187.70</td>
<td>$182.61</td>
<td>$181.440</td>
<td>$179.440</td>
</tr>
<tr>
<td>$22.422</td>
<td>$22.422</td>
<td>$22.422</td>
<td>$22.422</td>
<td>$22.422</td>
</tr>
<tr>
<td>$77.56</td>
<td>$72.422</td>
<td>$70.422</td>
<td>$69.422</td>
<td>$68.422</td>
</tr>
<tr>
<td>$193.760</td>
<td>$187.70</td>
<td>$182.61</td>
<td>$181.440</td>
<td>$179.440</td>
</tr>
</tbody>
</table>

**STATE REVENUE FROM NEW SOURCES - LINKS TO**

<table>
<thead>
<tr>
<th>Year Five</th>
<th>Year Four</th>
<th>Year Three</th>
<th>Year Two</th>
<th>Year One</th>
</tr>
</thead>
<tbody>
<tr>
<td>$36.330</td>
<td>$33.495</td>
<td>$32.495</td>
<td>$31.495</td>
<td>$30.495</td>
</tr>
<tr>
<td>$22.422</td>
<td>$22.422</td>
<td>$22.422</td>
<td>$22.422</td>
<td>$22.422</td>
</tr>
<tr>
<td>$77.56</td>
<td>$72.422</td>
<td>$70.422</td>
<td>$69.422</td>
<td>$68.422</td>
</tr>
<tr>
<td>$193.760</td>
<td>$187.70</td>
<td>$182.61</td>
<td>$181.440</td>
<td>$179.440</td>
</tr>
</tbody>
</table>

**STATE REVENUE FROM EXISTING SOURCES - LINKS TO**

<table>
<thead>
<tr>
<th>Year Five</th>
<th>Year Four</th>
<th>Year Three</th>
<th>Year Two</th>
<th>Year One</th>
</tr>
</thead>
<tbody>
<tr>
<td>$22.422</td>
<td>$22.422</td>
<td>$22.422</td>
<td>$22.422</td>
<td>$22.422</td>
</tr>
<tr>
<td>$77.56</td>
<td>$72.422</td>
<td>$70.422</td>
<td>$69.422</td>
<td>$68.422</td>
</tr>
<tr>
<td>$193.760</td>
<td>$187.70</td>
<td>$182.61</td>
<td>$181.440</td>
<td>$179.440</td>
</tr>
</tbody>
</table>

**OTHER REVENUE**

<table>
<thead>
<tr>
<th>Year Five</th>
<th>Year Four</th>
<th>Year Three</th>
<th>Year Two</th>
<th>Year One</th>
</tr>
</thead>
<tbody>
<tr>
<td>$48.440</td>
<td>$47.440</td>
<td>$46.440</td>
<td>$45.440</td>
<td>$44.440</td>
</tr>
<tr>
<td>$182.61</td>
<td>$181.440</td>
<td>$180.440</td>
<td>$179.440</td>
<td>$178.440</td>
</tr>
<tr>
<td>$22.422</td>
<td>$22.422</td>
<td>$22.422</td>
<td>$22.422</td>
<td>$22.422</td>
</tr>
<tr>
<td>$77.56</td>
<td>$72.422</td>
<td>$70.422</td>
<td>$69.422</td>
<td>$68.422</td>
</tr>
<tr>
<td>$193.760</td>
<td>$187.70</td>
<td>$182.61</td>
<td>$181.440</td>
<td>$179.440</td>
</tr>
</tbody>
</table>

**SHEET SPREADSHEET ROW 15**

**OTHER REVENUE New (specify and explain) LINKS TO REVENUE**

**SHEET SPREADSHEET ROW 13**

**OTHER REVENUE FROM EXISTING SOURCES (specify and explain) LINKS TO REVENUE**

**SHEET SPREADSHEET ROW 11**

**STATE REVENUE PER FTE**

# NEW FTEs

**SHEET SPREADSHEET ROW 9**

**STATE REVENUE PER FTE**

# EXISTING FTEs

**SHEET SPREADSHEET ROW 6**

**STATE REVENUE PER FTE**

# EXISTING FTEs
<table>
<thead>
<tr>
<th>Projected Enrollment</th>
<th>Year One</th>
<th>Year Two</th>
<th>Year Three</th>
<th>Year Four</th>
<th>Year Five</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Existing Full-time Students</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>In-State</td>
<td>15</td>
<td>35</td>
<td>40</td>
<td>65</td>
<td>65</td>
</tr>
<tr>
<td>Out-of-State</td>
<td>15</td>
<td>35</td>
<td>40</td>
<td>65</td>
<td>65</td>
</tr>
<tr>
<td><strong>Existing Full-time Total</strong></td>
<td>15</td>
<td>35</td>
<td>40</td>
<td>65</td>
<td>65</td>
</tr>
<tr>
<td><strong>Existing Part-time Students</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>In-State</td>
<td></td>
<td>15</td>
<td>25</td>
<td>25</td>
<td>30</td>
</tr>
<tr>
<td>Out-of-State</td>
<td></td>
<td>15</td>
<td>25</td>
<td>25</td>
<td>30</td>
</tr>
<tr>
<td><strong>Existing Part-time Total</strong></td>
<td></td>
<td>15</td>
<td>25</td>
<td>25</td>
<td>30</td>
</tr>
<tr>
<td><strong>New Full-time Students</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>In-State</td>
<td>15</td>
<td>20</td>
<td>20</td>
<td>65</td>
<td>65</td>
</tr>
<tr>
<td>Out-of-State</td>
<td>15</td>
<td>20</td>
<td>20</td>
<td>65</td>
<td>65</td>
</tr>
<tr>
<td><strong>NEW Full-time Total</strong></td>
<td>15</td>
<td>20</td>
<td>20</td>
<td>65</td>
<td>65</td>
</tr>
<tr>
<td><strong>New Part-time Students</strong></td>
<td></td>
<td></td>
<td></td>
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</tr>
<tr>
<td>In-State</td>
<td>10</td>
<td>20</td>
<td>20</td>
<td>25</td>
<td>30</td>
</tr>
<tr>
<td>Out-of-State</td>
<td>10</td>
<td>20</td>
<td>20</td>
<td>25</td>
<td>30</td>
</tr>
<tr>
<td><strong>New Part-time Total</strong></td>
<td>10</td>
<td>20</td>
<td>20</td>
<td>25</td>
<td>30</td>
</tr>
</tbody>
</table>

**NOTES:** New students are students who would not otherwise have been enrolled in your college if this program were not offered. The proposal text should explain the basis for this enrollment estimate.

Existing Students are students currently enrolled in another program at your college, or students who would have enrolled in another program at your college, had the new program not been established.

<table>
<thead>
<tr>
<th>Section Seats per Student</th>
<th>Year One</th>
<th>Year Two</th>
<th>Year Three</th>
<th>Year Four</th>
<th>Year Five</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Full-time Students</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
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</tr>
<tr>
<td>Existing Courses</td>
<td>5</td>
<td>5</td>
<td>5</td>
<td>5</td>
<td>5</td>
</tr>
<tr>
<td>New Courses</td>
<td>5</td>
<td>5</td>
<td>5</td>
<td>5</td>
<td>5</td>
</tr>
<tr>
<td><strong>Total (normally equals 10)</strong></td>
<td>10</td>
<td>10</td>
<td>10</td>
<td>10</td>
<td>10</td>
</tr>
<tr>
<td><strong>Part-Time Students</strong></td>
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<td></td>
<td></td>
<td></td>
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</tr>
<tr>
<td>Existing Courses</td>
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<td>3</td>
<td>3</td>
<td>3</td>
<td>3</td>
</tr>
<tr>
<td>New Courses</td>
<td>3</td>
<td>3</td>
<td>3</td>
<td>3</td>
<td>3</td>
</tr>
<tr>
<td><strong>Total (normally equals 6)</strong></td>
<td>6</td>
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<td>Seat &amp; Section Needs</td>
<td>Year One</td>
<td>Year Two</td>
<td>Year Three</td>
<td>Year Four</td>
<td>Year Five</td>
</tr>
<tr>
<td>--------------------------------------------</td>
<td>----------</td>
<td>----------</td>
<td>------------</td>
<td>-----------</td>
<td>-----------</td>
</tr>
<tr>
<td><strong>Seat Need for Existing Students</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Existing Courses</td>
<td>75</td>
<td>220</td>
<td>275</td>
<td>400</td>
<td>(415)</td>
</tr>
<tr>
<td>New Courses</td>
<td>75</td>
<td>220</td>
<td>275</td>
<td>400</td>
<td>415</td>
</tr>
<tr>
<td><strong>Seat Need for New Students</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Existing Courses</td>
<td>105</td>
<td>160</td>
<td>160</td>
<td>400</td>
<td>415</td>
</tr>
<tr>
<td>New Courses</td>
<td>105</td>
<td>160</td>
<td>160</td>
<td>400</td>
<td>415</td>
</tr>
<tr>
<td><strong>Total Seat Need</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Existing Courses</td>
<td>30</td>
<td>(60)</td>
<td>(115)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Avail. Seats in Existing Courses</td>
<td>30</td>
<td>(60)</td>
<td>(115)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Net Seat Need in Existing New Courses</td>
<td>100</td>
<td>380</td>
<td>435</td>
<td>800</td>
<td>830</td>
</tr>
<tr>
<td><strong>All Courses</strong></td>
<td>210</td>
<td>320</td>
<td>320</td>
<td>800</td>
<td>830</td>
</tr>
<tr>
<td><strong>Average Seats per Section</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Existing Courses</td>
<td>#DIV/0!</td>
<td>#DIV/0!</td>
<td>#DIV/0!</td>
<td>#DIV/0!</td>
<td>#DIV/0!</td>
</tr>
<tr>
<td>New Courses</td>
<td>#DIV/0!</td>
<td>#DIV/0!</td>
<td>#DIV/0!</td>
<td>#DIV/0!</td>
<td>#DIV/0!</td>
</tr>
<tr>
<td><strong>Net New Section Need</strong></td>
<td>#DIV/0!</td>
<td>#DIV/0!</td>
<td>#DIV/0!</td>
<td>#DIV/0!</td>
<td>#DIV/0!</td>
</tr>
</tbody>
</table>
THE CITY UNIVERSITY OF NEW YORK
ARTICULATION AGREEMENT

A. SENDING AND RECEIVING INSTITUTIONS

Sending College: Hostos Community College of the City University of New York
Department: Natural Sciences
Program: Food Studies
Degree: Associate in Science

Receiving College: Herbert H. Lehman College - CUNY
Department: Health Sciences
Program: Health Education and Promotion (Community Health Concentration)
Degree: Bachelor of Science

B. ADMISSION REQUIREMENTS FOR SENIOR COLLEGE PROGRAM

(e.g., minimum GPA, audition/portfolio):

About the Program

Health education aims primarily to motivate individuals and groups in various settings to assume greater responsibility for their health by learning and adopting behaviors that promote health and prevent disease. This is a rapidly expanding field that has received added impetus from recent Federal legislation emphasizing disease prevention and health promotion as major priorities of national social policy.

The program is designed to prepare students for careers in community health education. Students will be able to develop, manage, and evaluate health education and promotion programs in a variety of settings where such programs are implemented. These include public and community agencies, business and industry, hospitals, and other types of clinical facilities.

Admissions and Applications

Application Deadlines: Spring Admissions-September 15, Fall Admissions-February 1
CUNY Transfer Application is available online at www.cuny.edu
CUNY Application Processing Center: 212.997.CUNY

Please note that students must have completed one college-level course in mathematics and English with a grade of "C" or better. Additionally, if more than one college was attended, the GPA for admissions will be determined through a combination calculation of all attempted coursework.

Progression at Lehman

To earn a Bachelor's Degree at Lehman College, CUNY Associate Degree graduates need to:
- complete the courses required for the major/minor
- two LEH upper-division interdisciplinary courses
- two writing intensive courses
- elective courses if needed.

 Associate in Science Degree from Hostos Community College.

Hostos Community College graduates with the Associate Degree in Food Studies will receive 60 credits toward the Bachelor of Science in Health Education and Promotion at Lehman College. In addition, they will be deemed to have met all general education requirements at Lehman College.

Total transfer credits granted toward the baccalaureate degree: 60
Total additional credits required at the senior college to complete baccalaureate degree: 60
C. COURSE TO COURSE EQUIVALENCIES AND TRANSFER CREDIT AWARDED

CUNY Pathways General Education Requirements

<table>
<thead>
<tr>
<th>Required Common Core</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>A. English Composition ENG 110 &amp; ENG 111</td>
<td>12</td>
</tr>
<tr>
<td>B. Mathematical and Quantitative Reasoning MAT 120 Strongly Recommended</td>
<td></td>
</tr>
<tr>
<td>C. Life and Physical Sciences BIO 210 Strongly Recommended</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Flexible Common Core</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>A. World Cultures and Global Issues Modern Language Strongly Recommended</td>
<td>18</td>
</tr>
<tr>
<td>B. U.S. Experience in Its Diversity</td>
<td></td>
</tr>
<tr>
<td>C. Creative Expression</td>
<td></td>
</tr>
<tr>
<td>D. Individual and Society</td>
<td></td>
</tr>
<tr>
<td>E. Scientific World BIO 120 or 130 or CHE 210 240 Strongly Recommended</td>
<td></td>
</tr>
<tr>
<td>Restricted Elective: Select one course from Areas A-E.</td>
<td></td>
</tr>
</tbody>
</table>

Subtotal 30-32

<table>
<thead>
<tr>
<th>Specialization Requirements</th>
<th>[Hostos Community College] Course &amp; Title</th>
<th>Credit</th>
<th>[Lehman College] Course &amp; Title</th>
<th>Credit</th>
<th>Transfer Credit Granted</th>
</tr>
</thead>
<tbody>
<tr>
<td>FS 101 Food Studies</td>
<td>3</td>
<td>DFN Elective Credit</td>
<td>3</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>FS 120 Food Studies II: Food Environment and Justice</td>
<td>3</td>
<td>DFN Elective Credit</td>
<td>3</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>FS 200 Food, Policy and Advocacy</td>
<td>3</td>
<td>DFN Elective Credit</td>
<td>3</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>FS 220 Food, Health and Environment</td>
<td>3</td>
<td>DFN Elective Credit</td>
<td>3</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>FS 230 Food Studies Capstone</td>
<td>3</td>
<td>Elective Credit</td>
<td>3</td>
<td>3</td>
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</tr>
<tr>
<td>FS 225 Food Studies Career Practices</td>
<td>1</td>
<td>Elective Credit</td>
<td>1</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>MAT 120 Intro to Probability and Statistics</td>
<td>0-3</td>
<td>MAT 132 Introduction to Statistics</td>
<td>0-3</td>
<td>0-3</td>
<td></td>
</tr>
<tr>
<td>BIO 210 General Biology I</td>
<td>0-4</td>
<td>BIO 166 Principles of Biology Cells and Genes</td>
<td>0-4</td>
<td>0-4</td>
<td></td>
</tr>
<tr>
<td>BIO 120 Plants and Society</td>
<td>0-4</td>
<td>BIO 184 Plants and People</td>
<td>0-4</td>
<td>0-4</td>
<td></td>
</tr>
</tbody>
</table>

Track C. Health & Nutrition*

| HLT 110 Intro to Community Health | 3 | HEA 300 Introduction to Public Health | 3 | 3 |
| HLT 215 Nutrition | 3 | HSD 240 Nutrition and Health | 3 | 3 |
| HLT 220 Contemporary Health Issues | 3 | HEA 265 Contemporary Health Problems | 3 | 3 |
| BLS 150 Ethnicity, Health and Illness | 3 | AAS 228 The African American Family | 3 | 3 |
| PPA 122 Health Administration | 3 | HEA 249 Foundation of Health | 3 | 3 |

Electives | 5 |

Subtotal 25-28

TOTAL 60

*It is recommended that students transferring to Lehman College complete Track C. Health and Nutrition.
D. Senior College Upper Division Courses Remaining For Baccalaureate Degree

**INTEGRATION GENERAL EDUCATION REQUIREMENTS**

Students choose two courses:
LEH 352 Studies in Literature: Selected topics in literature.
LEH 353 Studies in the Arts: Selected topics in the arts.
LEH 354 Historical Studies: Selected topics in historical studies.
LEH 355 Studies in Philosophy, Theory & Abstract Thinking: Selected topics in philosophy, theory and abstract thinking.

<table>
<thead>
<tr>
<th>Course</th>
</tr>
</thead>
<tbody>
<tr>
<td><em>B.S. IN HEALTH EDUCATION AND PROMOTION</em></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Core Courses</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>HSD 240 Nutrition and Health*</td>
<td></td>
</tr>
<tr>
<td>HSD 266 The US Healthcare Delivery System</td>
<td></td>
</tr>
<tr>
<td>HSD 269 Fundamentals of Biostatistics for Health Professionals</td>
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<tr>
<td>HSD 306 Epidemiology</td>
<td></td>
</tr>
<tr>
<td>HEA 249 Foundations of Health*</td>
<td></td>
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<tr>
<td>HEA 267 Human Behavior and Health</td>
<td></td>
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<tr>
<td>HEA 300 Introduction to Public Health*</td>
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<tr>
<td>HEA 320 Health Counseling</td>
<td></td>
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<tr>
<td>HEA 400 Program Planning and Evaluation</td>
<td></td>
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<tr>
<td>HEA 437 Strategies in Community Health and Nutrition Education</td>
<td></td>
</tr>
<tr>
<td>BIO 181 Anatomy and Physiology I</td>
<td></td>
</tr>
<tr>
<td>BIO 182 Anatomy and Physiology II</td>
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</tbody>
</table>

Concentrations:
Option 1: Community Health (52-53 credits)
HEA 440 Seminar in Community Health
HEA 470 Internship in Community Health I
HEA Electives (8-9 credits)*

*May be satisfied

**FREE ELECTIVES**

It is suggested that students select these courses under advisement. Students may utilize these course credits to fulfill Liberal Arts requirements, take additional courses in their major, pursue a minor, or complete courses of interest to them.

<table>
<thead>
<tr>
<th>Course</th>
</tr>
</thead>
<tbody>
<tr>
<td><em>WRITING INTENSIVE</em></td>
</tr>
</tbody>
</table>

HCC students are required to complete two writing intensive courses. Individual sections of LEH courses may be designated as writing intensive and these sections would count toward both requirements.

**TOTAL** 60

E. Articulation Agreement Follow-Up Procedures

1. **Procedures for reviewing, updating, modifying or terminating agreement:**
   Hostos Community College Community/School Health Curriculum Coordinator and the Lehman College Program Coordinator will review the agreement every four years to ensure that students are properly informed and to address any updates.

2. **Procedures for evaluating agreement, e.g., tracking the number of students who transfer under the articulation agreement and their success:**
   After transfer into the Community Health major, the performance of Hostos Community College students will be tracked using the CUNY Institutional Research Data Base.
   Additionally, these students will be surveyed after graduation from Lehman to determine educational and occupational experience and success.
3. Sending and receiving college procedures for publicizing agreement, e.g., college catalogs, transfer advisers, Websites, etc.:

Notice of articulation will be placed in the respective catalogues, recruiting brochures, websites, and on the CUNY TIPPS website.

Respective transfer advisers will be informed and provided with copies of this agreement.

The CUNY School of Public Health/Lehman College will coordinate efforts with Lehman’s Admissions Office to make certain that materials are sent with recruitment officers for HCC’s Transfer Day event.

F. Additional Information

Hostos Community College
Division of Academic Affairs

Lehman College
Provost and Senior Vice President for Academic Affairs

Hostos Community College
Department of Natural Sciences Chairperson

Lehman College
Department of Health Sciences Chairperson
Appendix H
Appendix I
<table>
<thead>
<tr>
<th>Sector</th>
<th>Affiliation</th>
<th>Name</th>
</tr>
</thead>
<tbody>
<tr>
<td>Foodservice &amp; Restaurants</td>
<td></td>
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<tr>
<td>Non-profit</td>
<td></td>
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<tr>
<td>Terminals and Other Markets</td>
<td>Shop Rite/Wakefern</td>
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<td></td>
<td>Superintendent/retail</td>
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<td>Wholesale, aggregators and</td>
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<td></td>
<td>Distribution</td>
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<tr>
<td>Economic Development</td>
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<td>JHHC Point EDC</td>
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<tr>
<td>Health</td>
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<tr>
<td></td>
<td>NYS Department of Health</td>
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</tr>
<tr>
<td></td>
<td>Montefiore Hospital</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Renee Shanker, Director of Montefiore's Associate Wellness Program</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Cathy Nona, Director of Nutrition and Physical Activity</td>
<td></td>
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<tr>
<td></td>
<td>Josephine Luft, Executive Director</td>
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<tr>
<td>Agriculture</td>
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<td></td>
<td>USDA Agricultural Marketing Service</td>
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<tr>
<td>Policy</td>
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<td></td>
<td>NYS Mayor's Office, Food Policy</td>
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<tr>
<td></td>
<td>Kim Kesler, NYS food policy Coordinator</td>
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