### FS 120 Food Studies II: Food, Environment, and Justice

#### 3 Credits

#### **SYLLABUS**

Pre-requisite: FS 101; Pre-Co Requiste BIO 210 or BIO 110/111 or BIO 230 or ENV 110/111

## **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 **B**ooks:

Millstone, E., & Lang, T. (2013). *The Atlas of Food: Who Eats What, Where, and Why* (p. 128). Brighton, UK: University of California Press.

Sage, C. (2012). Environment and Food. New York: Routledge.

### **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

## **Assignments and Grading**

Assignment	Percent of course grade	Due

Personal reflection	5%	Week 3
Exam #1	20%	Week 5
Paper outline	5%	Week 9
Exam #2	20%	Week 8
Draft paper	10%	Week 11
Final paper	15%	Week 15
Final presentation	10%	Week 15
Participation, including	15%	Ongoing
attendance		
Total	100%	

# Teaching Methods

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

# **Classroom Policies**

- 1. Cell phones and beepers must be turned off or placed on "vibrate" mode when in the classroom.
- 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 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.
- 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: <a href="http://www.hostos.cuny.edu/sdem/student life aip.html">http://www.hostos.cuny.edu/sdem/student life aip.html</a>. 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.

#### No student shall:

- 1. Give or receive any assistance or communicate in any way with another student while an examination is in progress.
- 2. Use unauthorized notes, books or other materials during an examination.
- 3. Attempt to obtain or disseminate the content of any examination prior to its distribution by the instructor.
- 4. Procure or distribute answers to examinations in advance.

# **Integrity in Written Assignments**

- I. 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 zero 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 provides assistance on how to avoid plagiarism.

# **Examination Policies**

- 1. No student may remove an exam from the classroom under any circumstances.
- 2. Exams are timed; they must be completed within the stated time frame.
- 3. Students who arrive late for an exam will not receive extra time to complete the exam.
- 4. All requests for make-up exams will be determined by the instructor, based upon the merits of the request, on a case-by-case basis. Submitting a requestfor a make-up exam does not guarantee that permission will be granted.

#### **Tutorial and Counseling Services**

The <u>Hostos Academic Leaming Center</u> (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.

<u>Hostos Counseling Center</u> 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 <u>Disabilities</u> 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 <a href="http://www.hostos.cuny.edu/sswd/txt/html/geninfo.html">http://www.hostos.cuny.edu/sswd/txt/html/geninfo.html</a>. 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.

Ifyou require accommodations, please contact the Accessibility Resource Center:

Gabriella Burd, Director Patricia Salazar, Services Manager

Savoy (0) Building 120 Walton Ave, Room DIOIP 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 betweenfood that we eat and the Earth's ecosystem?
- How do diverse peoples and cultures viewfood and the environment?

## **Week One - Introduction to course topics**

Day 1: Course introduction and overview

Assignment for next class:

- "Why food and the environment?" Pages 1-7 in Sage, C. (2012). *Environment and Food*. New York: Routledge.
- Use the Internet to search for one news item related to food and the environment that has appeared in the New Yark 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:

• "Agroecology" Chapter 2, pages 23-32 *in* Gliessman, S. (2007). *Agroecology* (2nded., p. 384). Atlanta: CRC Press.

## Week Two-Agroecology

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

Assignment for next class:

• "Ecologies of Chaos" Chapter 2, pages 18-43 in Pena, D. G. (2005). *Mexican Americans and the Environment* (p. 212). Tucson, AZ: University of Arizona Press.

Day 2: Traditional agricultural knowledge and agroecologies

Assignment for next class:

 Mares, T. M., & Pena, D. G. (2011). Environmental and Food Justice: Toward Local, Slow, and Deep Food Systems. In A. H. Alkon & J. Agyeman (Eds.), Cultivating Food Justice: Race, Class, and Sustainability (pp. 197–220). Cambridge, MA: MIT Press.

### Week Three--Foodways and agroecological practices

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

Assignment /or next class:

- "Introduction "and "Out of Africa: Food, Techniques, and Ceremonies of the Mother Continent"/Pages 1-19 in Harris, J. B. (2011). High on the Hog: A Culinary Journey from Africa to America. New York City: Bloomsbury.
- Two-page personal reflection on what we've learned about agroecolog(ies)

Day 2: African American food ways

Due today: Personal reflection

Assignment for next class:

- "Ecosystem Services and typology of farming systems." P 68-93 *In* Sage, C. (2012). *Environment and Food*. New York: Routledge.
- "Agroecosystem diversity and stability" Chapter 16/p 217-227 *in* Gliessman, S. (2007). *Agroecology* (2nd ed., p. 384). Atlanta: CRC Press.

## 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:

- "The Global Agri-food system" Pages 14-49 *In* Sage, C. (2012). *Environment and Food*. New York: Routledge.
- Study map 9 ("Mechanization") *In* Millstone, E., & Lang, T. (2013). *The Atlas of Food: Who Eats What, Where, and Why* (p. 128). Brighton, UK:University of California Press.
- Study map IO ("Industrial Livestock Production") *In* Millstone, E., & Lang, T. (2013). *The Atlas of Food: Who Eats What, Where, and Why* (p. 128). Brighton, UK: University of California Press.

Day 2: Global and Industrialized Agrifood Systems

Assignment for next class:

• "The Need for Sustainable Food Production Systems" Chapter I, pages 3-16 *In* Gliessman, S. (2007). *Agroecology* (2nd ed., p. 384). Atlanta: CRC Press.

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

Assignment for next class:

• "Resources for primary production" Pages 94-1 10 in *In* Sage, C. (2012). *Environment and Food*. New York: Routledge.

Week Six-Abiotic elements in cropping systems

Day 1: Overview: Soils, biodiversity, and energy

Assignment for next class:

- "Soils." Chapter 8, pages 99-114 in Gliessman, S. (2007). Agroecology (2nd ed., p. 384). Atlanta: CRC Press.
- Study Map 16 ("Fertilizers") In Millstone, E., & Lang, T. (2013). The Atlas of Food: Who Eats What, Where, and Why (p. 128). Brighton, UK: University of California Press.

Day 2: Soil chemistry and nutrient balances

Assignment for next class:

 Pages 1-26 in. Reeves, M., Katten, A., & Guzman, M. (2002). Fields of Poison 2002 California Farmworkers and Pesticides.

Week Seven -Pesticides and their impacts

Day 1: The costs of pesticide use in agriculture

Assignment for next class:

- Map I5 ("Pesticides") *in* Millstone, E., & Lang, T. (2013). *The Atlas of Food: Who Eats What, Where, and Why* (p. 128). Brighton, UK: University of California Press.
- 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:

- "Livestock and the rising demand for meat." Pages 141-155 in Sage, C. (2012). *Environment and Food* (p. 320). New York: Routledge.
- 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

# UNITIII Contemporary Agri-food issues

- What are key issuesfacing 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/or next class:

• Wortman, S. E., & Lovell, S. T. (2013). Environmental Challenges Threatening the Growth of Urban Agriculture in the United States. *Journal of Environment Quality*, 42(5), 1283-1294.

Day 2: Urban agriculture

Assignment for next class:

- "Climate change, peak oil, fresh water, and peak oil" Pages 1 11-141 *in* Sage, C. (2012). *Environment and Food* (p. 320). New York: Routledge.
- Study Map 23 "Greenhouse Gasses" *in* Millstone, E., & Lang, T. (2013). *The Atlas of Food: Who Eats What, Where, and Why* (p. 128). Brighton, UK: University of California Press.

Week Ten-Climate change and genetic engineering (GMOs)

Day 1: Food and climate change

Assignment for next class:

- "Genetic resources in Agroecosystems" Chapter 14, pages 183-203 Gliessman, S. (2007). *Agroecology* (2nd ed., p. 384). Atlanta: CRC Press.
- Map 14 ("Genetically Modified Crops") *in* Millstone, E., & Lang, T. (2013). *The Atlas of Food: Who Eats What, Where, and Why* (p. 128). Brighton, UK: UC Press.

Day 2: Genetic engineering/GMOs

Assignment /or next class:

- Royte, E. (2012). Fracking Our Food Supply. *The Nation*, 1-9.
- Work on draft paper

Week Eleven-Farmland and fracking; "local" and "organic" agriculture

Due this week: Draft paper

Day 1: The debate over fannland 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:

• "Transforming foods" and "The environmental dimensions of food transformation" Pages 157-189 *in* Sage, C. (2012). *Environment and Food* (p. 320). New York: Routledge.

Week Twelve-- Final foods and their consequences

Day 1: Food industry and life cycle assessments

Assignment for next class:

• "Transporting food" and "Food waste" Pages 189-208 in Sage, C. (2012). *Environment and Food* (p. 320). New York: Routledge.

Day 2: Next steps along the food supply chain

Assignment for next class:

• <u>Sections in Barham</u>, James, Debra Tropp, Kathleen Enterline, Jeff Farbman, John Fisk, and Stacia Kiraly. *Regional Food Hub Resource Guide*. U.S. Dept. of Agriculture, Agricultural Marketing Service. Washington, DC.April 2012. Pages 4-23.

Week Thirteen- Food bubs and food jobs

Day 1: Food hubs

Assignment for next class:

- Sections <u>in</u> Freudenberg, N., Silver, M., & The Good Food Jobs Research Team. (2013). *Jobs/or a Healthier Diet and a Stronger Economy* (p. 49). New York City Food Policy Center at Hunter College New York, NY.
- Guest speaker orfield trip (e.g., food logistics expert; to sustainable food warehouse)

Day 2: "Good FoodJobs"

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 presentat ion onpaper 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 Westemscientific 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 I 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 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. Student 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, and critically, about food and the environment, and to 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., Googledocs). 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.