

ENV/FSST/SOC 330: Sustainable Food Production in Italy: Local Traditions and Global Transformation

Course Syllabus

Instructor: Elisa Ascione, Ph.D. Credits: 3 Contact Hours: 45 Prerequisites: None Class Hours: TBA Office Hours: TBA

Course Type: Course with Service Learning **Lab Fee:** 160 €

Course Description

There are more than six billion humans on the planet, each of whom need to eat every day: ever-higher food production is contributing to faster use of non-renewable fossil fuels and environmental degradation. What modes of food production and consumption may be viable, sustainable responses to this problem? What are some alternative models of food production? How are people responding to increasing inequalities relating to food availability? What can we learn from Italian food cultures in terms of sustainability?

This course focuses on the radical increase in food production over the last 70 years and the ecological and social problems it has created, as well as on some possible solutions: the organic movement, Slow Food, and the shift towards local food. A critical eye on these movements and analysis of their ability to change the trajectory of the global food production system, which is rapidly heading for collapse, will be casted. In addition to classroom lectures and discussions, a field trip to the world-famous Tuscan butcher Dario Cecchini will be taken.

Learning Objectives

By the end of the course, students will be able to:

- 1. *define* principles, frameworks, and indices (from various disciplines) for measuring progress toward a sustainable society;
- 2. *recall* the key characteristics of human and natural systems as they pertain to sustainability and analyze different models of transitions towards a sustainable food system;
- 3. evaluate existing research on sustainability from a variety of disciplines;
- 4. *provide* different political, environmental and social interventions for more sustainable food production in Italy and in the USA without negatively affecting environmental justice:

5. *integrate* experiential learning activities with classroom knowledge to practice systematic, public-facing, and ethical scholarship using twenty-first-century research and communication tools.

Course Materials

<u>Readings</u>—A course reader, including all the indicated readings, will be available at a local copy shop. <u>Other</u>—Students are required to maintain a food journal during the semester.

Learning Outcomes and Assessment Measures

By the end of the course, students will be able to:

Learning Outcomes	Assessment Measures
	Course requirements that will be used to assess students' achievement for each learning outcome
consider the complex interplay of social and political factors in shaping food systems;	Exams
analyze aspects of production, distribution, and consumption of food to determine their sustainability;	Presentations
compare the genesis of the alternative food movements in Italy;	Class Discussions
integrate theory and practice as it applies to modern-day Italian foodways;	Post-Fieldtrips Research
define sustainability on a local, national, and global scale using a multidisciplinary and multifunctional approach.	Exams

Course Materials

<u>Readings</u>

A course reader, including all the indicated readings, will be available at a local copy shop. Please see "Umbra Institute Course Materials - Textbooks and Readers" handout provided in the orientation folder for more information. Additional reading assignments, both optional and required, will be made available by the instructor.

Assessment

Participation	15%
Pop-up quiz on a reading	5%
Oral Environmental News Report	5%
Service Learning Project	15%
EngageGAMES Presentation	5%
Midterm Exam	20%
Presentation	15%
Final Exam	20%

Grading

Letter grades for student work are based on the following percentage scale:

Letter Grade Range	Numerical Score Equivalent	Student Performance
A	93% - 100%	Exceptional
A-	90% - 92%	Excellent
B+	87% -89%	
В	83% - 86%	Superior
B-	80% - 82%	
C+	77% - 79%	
С	73% - 76%	Satisfactory
C-	70% - 72%	
D+	67% - 69%	
D	63% - 66%	Low Pass
D-	60% - 62%	
F	59% or less	Fail (no credit)

Course Requirements

Grades are based on the midterm and final exam, service learning project, presentations, and participation.

Participation (15%)

For a spirited discussion, students' active attention and participation are required. Class participation grades are based on four points:

- 1. Being on time in class and respectful behavior
- 2. Working in pairs/in groups, helpfulness towards classmates
- 3. Showing active interest in the course and its topics
- 4. Required readings: readings should be done for the class the day they are assigned. In order to show that they have done the readings, students **must** raise their hand in class, offering their perspective on the reading, and/or asking questions about it.

Pop-up quiz on a reading (5%)

Unannounced quiz on the reading due for that day, during class time.

Oral Environmental News Report (pass/fail) (5%)

At the beginning of class, five-minute report on an environmental piece of news from a reliable online newspaper (The Guardian, The Independent, The New York Times, The Washington Post, etc.). The piece of news must be from the current week or from the previous one.

Service Learning Project (20%) (Project: 15%; End of Semester Community EngageGAMES Presentation: 5%) Students will work on the Umbra gardens located at the Gruppo Famiglia Taralla Residency and at Orto Sole. Students will help with seasonal tasks, including tilling the soil; planting herbs, vegetables, and flowers; and harvesting.

During Special Academic Events Week, the class will create an activity based on the service learning project to be shared with the Umbra community at the Community EngageGAMES Presentation. Participation in this event is MANDATORY and an integral part of the community engagement grade. Please see the Service Learning

Syllabus Appendix at the end of the syllabus for more information.

Midterm Exam (20%)

An exam covering all topics presented in the first half of the course. It will consist of short answers. The exam will take approximately 90 minutes to complete and is closed book/closed notes. *No alternative exam dates or times will be offered.*

Presentation (15%)

A 20-minute presentation in pairs on best practices in food and sustainability (e.g., the sustainable policies of a multinational company; a farm that applies an alternative form of agriculture; the achievements of a consumer movement; an educational program for food and health, etc.). I expect: 1) a brief activity/questions to involve the class 2) a brief theoretical introduction in which you also explain why your presentation is relevant 3) a description of your case-study 4) an evaluation of its achievements 5) counter arguments 6) a clear conclusion 7) questions for discussion 8) a bibliography and list of sources 9) slides with no more than five words. You should not read your presentation from written text but rehearse it in advance.

Final Exam (20%)

An exam covering all topics presented in the second half of the course. It will consist of short answers. The exam will take approximately 120 minutes to complete and is closed book/closed note. This is the only time the exam will be given. *No alternative exam dates or times will be offered*.

Additional Course Information

All the activities, topics, lectures, and readings may be subject to change, always with due warning.

Submitting Work Late and Incomplete/Longer assignments

If students submit work after the deadline, they will incur a 5% grade deduction for each working day the assignment is late. Working days are Monday through Friday. To avoid penalty, students must get approval for an extension at least one day prior to the deadline. The instructor will not accept work that is later than seven working days. If students are absent, they must email the assignments to the professor to avoid penalty. If assignments are shorter or longer than the assigned number of pages, there will be a 5% grade deduction for each missing or extra page.

Attendance Policy

Class attendance is **mandatory**. Students are allowed **two "free" absences**, which do not need to be justified. **It is the students' responsibility to keep them in case of real necessity (sickness or any other unforeseen inconvenience that may prevent students from being in class)**. Each additional absence, unless for a very serious reason, will lower the students' grade by one grade level (i.e., a final grade of a B+ would be lowered to a B).

If students miss class, they are responsible for obtaining class notes from other students and/or for meeting the professor during office hours. It is also the policy of the Institute that any student who has eight or more absences automatically fails the class.

Except in the case of medical emergencies, absences are not accepted when tests are scheduled; tests cannot be made up. Furthermore, scheduled times and dates indicated for exams, quizzes, oral presentations, and any other graded assignments cannot be changed for any reason. Even if more sections of the same class are activated, students may only take exams during the scheduled times and dates for the section they are enrolled in.

Presence during mandatory field trips is especially important for student performance in class. Missing a mandatory field trip, unless for a very serious reason that is communicated to the professor and Umbra Academic Director in a timely manner, will lower students' final grade by one grade level (i.e., a final grade of a

B+ would be lowered to a B).

Academic Integrity

All forms of **cheating** (i.e., copying during exam either from a fellow student or making unauthorized use of notes) and **plagiarism** (i.e., presenting the ideas or words of another person for academic evaluation without acknowledging the source) will be handled according to the Institute Academic Policy, which can be found in the Umbra Institute Academic Policies and Conduct Guidelines.

Classroom Policy

Students are expected to follow the policy of the Institute and demonstrate the appropriate **respect** for the historical premises that the school occupies. Please note that **cell phones** must be turned off before the beginning of each class. **Computers and other electronic devices** cannot be used during class lectures and discussions.

Schedule of Topics, Readings, and Assignments

week 1

Food and Sustainability.

This lecture presents the study of food and the movement for greater sustainability in its production as an interdisciplinary exercise. In this first class, the instructor will explain the structure of the course.

Global Food Systems.

The global food system is the result of globalization and industrialization applied to food and agriculture. Several arguments have been made in support and against the promotion of a global industrial food system or of local and regional systems.

Reading

Sandler, Ronald L. "Food Systems" pp.4-30 in *Food Ethics: The Basics*. 1 edition. London ; New York: Routledge. 2014.

Additional Readings

Heinberg, Richard. "What Is Sustainability?" In *The Post Carbon Reader: Managing the 21st Century's Sustainability Crises*, edited by Richard Heinberg, 13–20. Healdsburg, CA: Watershed Media, 2010.

Dillard, Jesse, Veronica Dujon, and Mary King. "Defining Social Sustainability." In *The Post Carbon Reader: Managing the 21st Century's Sustainability Crises*, edited by Richard Heinberg, 21–24. Healdsburg, CA: Watershed Media, 2010.

week 2

The "Green Revolution" and Conventional Agricultural Production.

Between 1943 and the late 1970s, a combination of new plant varieties and the widespread use of fossil fuel-based fertilizers and pesticides dramatically raised world food production and changed the relationship between the industrialized world and the developing world. The class will talk about how the Green Revolution began, and its effects.

Reading

Standage, Tom. *An Edible History of Humanity*. New York: Bloomsbury USA, 2010. pp. 199-220

Climate Change and Agriculture

In 2016, the Paris Agreement on climate change entered into force, addressing the need to limit the rise of global temperatures. The class will discuss how agriculture is one of the most weather-dependent enterprises, including the impact of recent years reports of extreme weather which seem more frequent than in the past.

Reading

Chase, Lisa, and Vern Grubinger. *Food, Farms, and Community: Exploring Food Systems*. Durham, New Hampshire: Univ Of New Hampshire Press, 2014. Chapter 7: Climate Change and Agriculture pp.108-122

Additional Readings

Sgobbi, Alessandra, and Carlo Carraro. "Climate Change Impacts and Adaptation Strategies in Italy: An Economic Assessment." *SSRN Electronic Journal*, 2008. <u>http://www.ssrn.com/abstract=1086627</u>.

World Health Organization. "Climate and Health Country Profile: Italy." United Nations. Accessed June 29, 2019.

week 3

Organic Agriculture: From a Movement to an Industry.

What is the history of organic food production and labelling? The class will discuss the positive aspects of organic agriculture but will also offer a critique of the "supermarket pastoral" around "natural" food.

Readings

Lockeretz, W. pp., 1-8, ix-xii Organic Farming. An International History. Wallingford and Cambridge: Cabi, 2007

EU Organic Regulation 1-22, "Supermarket Pastoral," pp. 134-140

week 4

Agroecology and Agroforestry

Agroecology is based on applying ecological concepts and principles to optimize interactions between plants, animals, humans and the environment.

<u>Readings</u>

Torralba, Mario, Nora Fagerholm, Paul J. Burgess, Gerardo Moreno, and Tobias Plieninger. 2016. "Do European Agroforestry Systems Enhance Biodiversity and Ecosystem Services? A Meta-Analysis." *Agriculture, Ecosystems & Environment* 230 (August): 150–61.

Paris, Pierluigi, Francesca Camilli, Adolfo Rosati, Alberto Mantino, Giustino Mezzalira, Cristina Dalla Valle, Antonello Franca, et al. 2019. "What Is the Future for Agroforestry in Italy?" *Agroforestry Systems*, January.

My Biggest Little Farm: Documentary and Discussion

week 5

Case study: A sustainable restaurant?

The class will visit a local restaurant that prides itself of making sustainable choices while promoting social inclusion.

Guest Lecture: Meet the farmer

The class with meet a biodynamic farmer, Mirco Calcabrina, a wine and goat cheese maker from the Montefalco area, for a special lecture on best practices in viticulture and goat farming.

Readings

https://www.biodynamics.com/biodynamic-principles-and-practices https://www.biodynamics.com/farm-individuality https://www.biodynamics.com/preparations

week 6

Social Farming, Project Visit: Orto per Orto, therapeutic gardening for people with special needs

Reading:

Loue, Sana, Richard R. Karges, e Candace Carlton. «The Therapeutic Farm Community: An Innovative Intervention for Mental Illness». *Procedia - Social and Behavioral Sciences* 149 (Settembre 2014): 503–7.

Urban Agriculture: Field Visit Orto Sole.

Can the countryside and the city grow to be closer? Today, we will rethink the relationship between urban dwellers and their source of food. Can cities become more sustainable by growing food?

Readings

McClintock, Nathan "Radical, Reformist, and Garden-Variety Neoliberal: Coming to Terms with Urban Agriculture's Contradictions." Local Environment 19(2): 147–171. 2014

Additional Reading

Nugent, Rachel A. "Measuring the Sustainability of Urban Agriculture." In *For Hunger-Proof Cities: Sustainable Urban Food Systems*, edited by Mustafa Koc and International Development Research Centre (Canada), 95–102. IDRC, 1999.

week 7

Midterm Review.

MIDTERM EXAM

SEMESTER BREAK (March 09-15)

week 8

Consumption: Food and Public Health. "Fed Up". Documentary screening and discussion.

The Double Pyramid: Sustainability, Nutrition and Healthy Diets

Nutritionists and health specialist have shown that the so-called Mediterranean Diet is one of the healthiest diet for our body, and also the most environmentally friendly.

<u>Readings</u> Serra-Majem; Medina, pp. 37-46

week 9

"Good, Clean and Fair": The Case of Slow Food.

From the beginning, Slow Food was a "political" food movement. Students will discuss Carlo Petrini's turning away from the mainstream left and creating the group that would become Slow Food. In addition, we will look at Slow Food's current stance and decide whether it is the blueprint for global sustainability.

Readings

Petrini, Carlo. *Slow Food: The Case for Taste.* New York Chichester, West Sussex: Columbia University Press, 2003, pp. iii-63 https://www.slowfood.com/

Additional Readings

Laudan, Rachel. "Slow Food: The French Terroir Strategy, and Culinary Modernism. An Essay Review of Carlo Petrini, Trans. William McCuaig." *Food, Culture, and Society* 7, no. 2 (Fall 2004): 134–44.

Peano, Cristiana, Paola Migliorini, and Francesco Sottile. "A Methodology for the Sustainability Assessment of Agri-Food Systems: An Application to the Slow Food Presidia Project." *Ecology and Society* 19, no. 4 (2014).

Fair Trade as Food Activism?

The class will visit the Fair Trade Shop and meet with volunteers to discuss their vision of international development through "trade not aid".

Reading

https://www.fairtrade.net/ https://www.starbucks.com/responsibility/sourcing/coffee

Additional Reading

https://www.theguardian.com/business/2019/jul/23/fairtrade-ethical-certification-supermarketssainsburys

Parvathi, P., U. Grote, and Hermann Waibel, eds. 2017. Fair Trade and Organic Agriculture: A Winning Combination? Boston, MA: CABI.

week 10

Students' presentations 1

Students' presentations 2

week 11

Consumption: *Meat and Vegetarianism.*

It takes at least seven pounds of grain to make a pound of meat. The class will look at the true costs of meat-eating as we investigate CAFO's and explore the possibility of "sustainable meat."

Readings

Stoll-Kleemann, Susanne, e Tim O'Riordan. «The Sustainability Challenges of Our Meat and Dairy Diets». *Environment: Science and Policy for Sustainable Development* 57, n. 3 (4 maggio 2015): 34–48. https://doi.org/10.1080/00139157.2015.1025644.

Slow Food International. «Eat Less Meat, of Better Quality: Don't Do It with Sadness. Do It with Joyl», 26 agosto 2019.

https://www.slowfood.com/eat-less-meat-of-better-quality-dont-do-it-with-sadness-do-it-with-joy

Sandler, Ronald L. *Food Ethics: The Basics.* 1 edition. London ; New York: Routledge, 2014, "Synthetic meat," pp. 140-143

Life Cycle Assessment

Is local more sustainable than organic? The concept of Life-Cycle Analysis (LCA) and the true food miles (and carbon footprint) of "local" foods will be introduced.

Readings

Williams, James E. Just Food: Where Locavores Get It Wrong and How We Can Truly Eat Responsibly. Reprint edition. New York, NY: Back Bay Books, 2010. pp. 17-51.

Cerutti, Alessandro K., Sander Bruun, Dario Donno, Gabriele L. Beccaro, and Giancarlo Bounous. "Environmental Sustainability of Traditional Foods: The Case of Ancient Apple Cultivars in Northern Italy Assessed by Multifunctional LCA." *Journal of Cleaner Production* 52 (August 1, 2013): 245–52.

<u>Additional Readings</u> Ruini, Luca F. "Dry Semolina Pasta LCA." 2009.

Svoboda, Susan. "Notes on Life Cycle Analysis." In *Environmental Management: Readings and Cases*, edited by Mike Russo, 2nd ed., 385–294. Los Angeles: SAGE, 2008.

Service Learning Project: End of Semester Community EngageGAMES overview with Umbra staff and preparation for event.

Field Trip to Dario Cecchini.

Visit and lunch to the world famous butcher in Chianti region, Tuscany. Vegetarian and vegan menus available (please ask in advance). Be prepared to hike for about one hour in the countryside, wear tennis shoes, and bring water and an umbrella in case of rain. Bring Dramamine for the bus if you suffer from motion sickness. We leave early in the morning and we are usually back in Perugia by 6pm.

Assignment: watch and comment Dario Cecchini's Netflix episode on "A Chef's Table"

week 12

Production: GMO

The lecture will explore what exactly is "genetic modification". Is GMO the benevolent technology Monsanto would have us believe it is, or is there something wrong about genetic modification and patenting life?

<u>Readings</u>

Sandler, Ronald L. Food Ethics: The Basics. 1 edition. London ; New York: Routledge, 2014, pp.113-139

Additional Readings

Pellegrino, Elisa, Stefano Bedini, Marco Nuti, and Laura Ercoli. "Impact of Genetically Engineered Maize on Agronomic, Environmental and Toxicological Traits: A Meta-Analysis of 21 Years of Field Data." *Scientific Reports* 8, no. 1 (February 15, 2018): 3113.

Lang, John T. 2016. What's So Controversial about Genetically Modified Food? London: Reaktion Books. pp-7-44.

Waste, Food, and the Environment

During this lecture, the class will analyze the social and environmental costs of food waste at a global level, including examples of food recovery actions from Italy.

Readings

Baglioni, S., B. De Pieri, e T. Tallarico. «Surplus Food Recovery and Food Aid: The Pivotal Role of Non-Profit Organisations. Insights From Italy and Germany». *Voluntas: International Journal of Voluntary and Nonprofit Organizations* 28, n. 5 (ottobre 2017): 2032–52. https://doi.org/10.1007/s11266-016-9746-8.

Stuart, Tristram. Waste: Uncovering The Global Food Scandal. 1 edition. W. W. Norton & Company, 2009., pp. xv-xxii;

WEEK 13

Final Exam Review.

Concluding Remarks.

Service Learning Final Reflection report due in print at the beginning of class. Engaged Games PowerPoint and all activities ready for presentation rehearsal.

WEEK OF FINAL EXAMS AND SPECIAL ACADEMIC EVENTS

The Final Exam and Special Academic Events Calendar will be provided later in the semester.







ENV/FSST/SOC 330: Sustainability and Food Production in Italy

Service Learning Project

Syllabus Appendix

What is service learning?

Service learning is a type of experiential education integrated into a course in which:

- students engage in an organized activity or project aimed to address a community need that is identified in collaboration with the community partner;
- students critically reflect on the link between the experience in the community, course content, and the learning goals; and
- there is reciprocal learning both by the students and by the community partners.

Students will need a certain degree of flexibility, creativity, and self-initiative to realize a service learning project. Organization and open communication in-class with the professor and classmates will be key to student success.

Service Learning Project Overview

Community Partners

Cooperativa Nuova Dimensione operates Gruppo Famiglia Taralla, a residency for individuals with mental health challenges where horticulture therapy is used as a technique to enhance their quality of life and generate positive emotions and social interactions.

Orto Sole, a non profit association that makes green spaces available to the community, promotes a healthy living culture, and develops projects that aim at social support. The association intends to create a social network that deals with the care of the environment, the re-evaluation of disused green spaces.

Project Description

Students will work at the gardens helping with seasonal tasks, including tilling the soil; planting herbs, vegetables, and flowers; and harvesting.

Organization, Expectations, and Roles

Students will be required to meet three times outside of class to work in the orto at their assigned date and time. The assigned team dates and times are considered mandatory field trips. A doctor's note is required for an absence. The service learning final grade will be lowered by 5% for each unjustified absence.

Each student will record their own project contributions for the final report and EngagedGames presentations at the end of the semester.

Student Learning Outcomes

Through this project, students will:

- discover how to apply sustainable gardening in a community setting,
- develop awareness and skills in intercultural communication and the Italian language,
- improve teamwork and multitasking skills, and
- gain a better understanding of the host culture and community.

Final Reflection

Each person will prepare a final reflection, which will provide a summary of their experiences.

Guidelines:

- 1.5/2 pages
- 1.5 Spaced, Times New Roman, font size 12
- Must contain description of individual work, achievements, problems encountered, suggestions for future Umbra students, and conclusions.
- Printed copy due on Tuesday, April 16th at the beginning of class

Community EngaGAMES Presentation

During the Special Academic Events week, the class will give a 25-minute presentation to the Umbra community at the Community EngageGAMES Presentation. The class will work together to share a few words about the course and project, lead a meaningful activity that focuses on the project, and provide a few thoughts about their experience with the project and partner. Students will receive guidelines and presentation order after the mid-semester break. Participation in this event is MANDATORY and an integral part of the community engagement grade.

Grading Rubric

The service learning project is worth a total of 20% of the final course grade, which will be divided into four categories:

- 1. Participation in orto activities and final report (4 visits in total -15%)
- 2. Community EngageGAMES Presentation (5%)