



Instructor: Daniela Passeri

Office Hours: By appointment

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Course Description

The central objective of this course is to introduce sustainability as an inter-disciplinary, “systemic” science by focusing upon the impact of agriculture, production, trade, distribution and consumption of food. We will look at these impacts not only on the environment, but also on society on both a global and local level, incorporating dimensions and aspects of social justice, equity and human rights.

We will read and analyze current documents, articles, papers by international institutions, boards, committees, researchers and social movements, approaching the debate on sustainability from different points of view.

The course will investigate many aspects of agriculture and food (soil, seeds, water scarcity, climate change, animal breeding, processing, distribution, waste, and so on) in order to acquire the tools to participate in current debates in the field of sustainability and discuss them critically.

During our field trips, students will have the opportunity to be in contact with the local community, with individuals and organizations engaged in sustainable agriculture, food production and trade, and to experience sustainable bottom-up practices.

Homeworks and exams

Each week there will be assigned reading: **students are expected to carefully study and analyze the reading and to write a short summary underling three key points and commenting on them in order to participate actively in the discussion that will follow in class.**

- For **mid-term exam** (30th October) students will be required to make a **presentation of 15 minutes** to discuss in class supplemented by a written text that, after the presentation, students must send to the instructor.
- The **final exam** (9th December) will be written (open-ended questions).

- By the end of the semester (9th December) students will be requested to **write an essay** for the course (at least 2500 words in length), a deep analysis of one of the issues raised during the course.

Students are encouraged to consult with the instructor any time during the semester regarding their main interests and ideas to further guide their areas of inquiry related to sustainable food systems practices.

Course Requirements

Participation and Attendance: 30%

Mid-term presentation: 30%

Final exam and essay: 40%

Learning expectations:

To familiarize students with the contemporary debates on food and environmental issues and recover a degree of *food citizenship*.

To acquire analytical tools to continue following current events related to sustainable food systems.

To increase social awareness and personal engagement in sustainability.

To provide a better understanding of Italian environment and society.

Grading Scale

98-100 A+	88-89.99 B+	78-79.99 C+	68-69.99 D+
93-97.99 A	83-87.99 B	73-77.99 C	63-67.99 D
90-92.99 A-	80-82.99 B-	70-72.99 C-	60-62.99 D-
<59.99 F			

Course Policy

Academic Integrity:

Effective learning, teaching and research all depend upon the ability of members of the academic community to trust one another and to trust the integrity of work that is submitted for academic credit or conducted in the wider arena of scholarly research. Such an atmosphere of mutual trust fosters the free exchange of ideas and enables all members of the community to achieve their highest potential.

In all academic work, the ideas and contributions of others must be appropriately acknowledged, and work that is presented as original must be, in fact, original. Faculty, students, and administrative staff all share the responsibility of ensuring the honesty and fairness of the intellectual environment at the Siena Art Institute and Siena School for Liberal Arts.

Students with documented disabilities:

Any student who has a documented disability that may prevent him or her from fully demonstrating his or her abilities should contact the instructor as soon as possible to discuss accommodations necessary to ensure full participation and to facilitate the educational opportunity.

Participation and Attendance:

We consider attending class a crucial part of gaining the most from your study abroad experience. For this reason, we allow only **one unexcused absence** per course during the 15 weeks of the program. This means that you are only allowed to miss **one** lesson of each course for unexcused reasons. Reasons for an absence to be considered unexcused include absences related to personal travel (including delays, strikes, missed connections, etc.) or visits from family and friends.

In addition, being late to class on **4** occasions constitutes an unexcused absence. Please also consider that leaving before the end of the lesson or coming back late from a break is the equivalent of an unexcused absence.

Participation and attendance is worth 30% of the overall grade for every class.

Absences due to health-related issues are considered excused if the student informs the professor and office by email or phone before class begins.

No make-up exams or critiques will be considered unless warranted by extreme circumstances [for example, health, family tragedy] supported with proper documentation.

Regular attendance, punctuality at and participation in all class meetings and field-trips are required and mandatory. Students are expected to attend all classes; absences will affect your course grade. Each lecture will cover a wide range of material and missed information will be

difficult to obtain. If you do miss a class for whatever reason, you are responsible for photocopying a fellow classmate's lecture notes.

Late submissions

All writing assignments are to be completed strictly on time. Research papers will incur a 5% penalty for every day over the submission date. Papers will not be accepted for consideration and grading after 1 week.

Electronic devices

Students are kindly requested not to use laptops, tablets or cell phones in class. We shall be fostering an environment of very human, face-to-face interactions. Electronic devices only when, and if, they are explicitly required for an exercise, please!

Text book and required materials:

All readings will be provided in the course reader pack and with PDF. Students are not required to purchase a textbook. However, it is important to note that the use of supplementary texts and independent research will be looked favorably upon for completion of assignments.

Course Outline

WEEK 1 – 23rd / 25th September

COURSE INTRODUCTION

General introduction to the sustainability debate: figures on biodiversity, demography, ecological footprints, resource consumption, food waste, farming systems, food production and consumption patterns.

Physical features and habitats of the Italian peninsula. Distinctive features of Italian environmental history.

No reading, come prepared to explain your reason and motivation for this course

WEEK 2 – 30th / 2nd October

SOIL

Soil is a non-renewable resource: major threats to soil fertility and food security. Example of

soil mis-management and protection of landscape in Tuscany.

Principles and features of agroecology and organic farming.

Reading: Report of the UN Special Rapporteur on the Right to Food, O. De Schutter 2014.

WEEK 3 – 7th / 9th October

SEEDS & BIODIVERSITY

The Tuscan regional law on seeds protection as “one of the most interesting institutional attempts at Italian and European level towards enhancing and protecting agricultural biodiversity” (E. Bertacchini).

Overview on seeds production, certification schemes, regulation, patents, GMO controversy.

Participatory Plant Breeding (PPB) to strengthen the farmers' capacity to develop varieties.

Reading: SMART Soil Fact Sheet

Agroecology: Key Concepts, Principles and Practices, Socla, 2012

WEEK 4 – 14th / 16th October

WATER

The Siena medieval water management system (Bottini) introduces the issue of water scarcity, use and misuse in agriculture. How organic agriculture can preserve the quality of drinking water (Munich and New York City case studies). Virtual water and waterfootprint of foodstuffs. Ocean acidification and pollution. Aquaculture issues.

Reading: Slow Food Position Paper on Seeds, 2015

WEEK 5 – 21st / 23rd October

ANIMAL HUSBANDRY

Focus on Cinta Senese rescue from extinction in Siena province. Extensive versus intensive husbandry. Environmental costs of livestock production.

Reading: The Water Needed for Italians to Eat Pasta and Pizza, Aldaya & Hoekstra, 2010

WEEK 6 – 28th / 30th October

FOOD WASTE

Food loss and food waste along the food supply chain. Main causes and possible solutions.

Reading: Main critical factors affecting the welfare of beef cattle and veal calves raised under intensive rearing systems in Italy: a review, G. Cozzi, M. Brscic, F. Gottardo, 2015

******* 30th October : MID TERM PRESENTATION IN CLASS *******

1st / 10th November - MID-TERM BREAK – NO CLASS

WEEK 7 – 11th / 13th November

WHAT IS FOOD?

Innovation and technological changes in food industry: substitutionism and fractionation. The use of natural and artificial food colors and flavors. The molecular gastronomy in Italy and Spain.

Introduction to LCA (Life-Cycle Assessment) to measure the environmental impact of food production (focus on Vernaccia di San Gimignano LCA).

Do PDO/PGI quality schemes guarantee and enhance food quality. The Example of Pecorino Toscano.

Reading: Cultured meat: state of the art and future, 2018

WEEK 8 - 18th / 20th November

FOOD TRADE

Effects of trade liberalisation on the food market. The concentration of food supply chains and the consequences on the environment and society. Unfair trading practices and illegal working conditions in Italian food system.

Reading: To use or not to use protected geographical indications? An analysis of firms' strategic behavior in Tuscany, 2014

WEEK 9 – 27th November

SHORT SUPPLY CHAINS

What do we mean by “local food”? Experiences of Urban & Peri-Urban agriculture.

Green Public Procurement to enhance local sustainable food production (case studies: School Food Service in Rome and Copenhagen Public Kitchens).

Reading: Eyes on the price, International Supermarket Buying Groups, Somo 2017

WEEK 10 – 2nd / 4th December

CLIMATE CHANGE

Siena province is the very first certified Carbon Free Area in Europe. How comes?

How does the way we produce food affect climate? How does climate change affect food production? Agriculture is the second largest source of GHG emissions, but it could even prove a net sink. The Kyoto Protocol, the Paris Agreement, the IPCC special report on Land and Food Security (2019).

Observed impact on grapes and olives trees in Tuscany.

Reading: The Food in Anthropocene: 5 strategies for the Great Food Transformation, 2019

WEEK 11

******* 9th December - FINAL WRITTEN EXAM *******

FINAL ESSAY DUE

FIELD TRIPS (to be confirmed):

Spannocchia – Cinta Senese Tour (Chiusdino)

Comune di Bagnaia Organic Farm (Ancaiano)

Mensanello Farm and Agriturismo (Colle di Val d'Elsa)