



## **Sustainability and Food**

**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 interdisciplinary, “systemic” science by focusing upon the impact of agriculture and 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, water, seeds, climate change, water, animal breeding, 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 and food production, and to experience sustainable bottom-up practices.

### **Course Hours**

Course meets twice a week.

### **Course Requirements**

Participation and Attendance: 30%

Mid-term essay: 30%

Final essay: 40%

Each week there will be assigned reading: students are expected to read it in order to participate actively in the discussion that will follow at the beginning of the next week. All students will be required to write a presentation of 15 minutes (mid term exam) and a final paper of 2500 words (final exam). **Presentations and papers will be discussed in class.** Students are encouraged to consult with the instructor during the semester regarding their main interests and ideas to further guide their areas of inquiry related to sustainable practices.

### Learning expectations:

1. To familiarize students with the contemporary debates on environment and food and recover a degree of *food citizenship*
2. To acquire analytical tools to continue following current events related to sustainable practices
3. To increase social awareness and personal engagement in sustainability
4. To provide students with real experiences in the local community

### 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. Students are not required to purchase a textbook. However, it is important to note that the use of supplementary text will be looked favorably upon for completion of assignments.

## **Course Outline**

### **WEEK 1**

#### **COURSE OVERVIEW AND GOALS**

General introduction to sustainability as a inter-disciplinary science, from "The Limits to Growth" (1972) to the latest international conferences, programs and reports. How can we measure (un)sustainability? Figures on demography, hunger, malnutrition, wildlife population, biodiversity, ecological footprints, deforestation, resource consumption, food waste, etc.

Introduction to the Degrowth Theory and to the Happiness Economy.

**Reading: UN Final Report on Right to Food (Olivier De Schutter, 2014).**

## WEEK 2 - 3

### SOIL

From the Green Revolution's benefits to the criticism of industrial agriculture that has caused soil degradation, loss of fertility, monoculture, transformation of landscape. Soil for food or for bio-energy?  
Introduction to Organic farming and Permaculture.

Documentary screening: A Farm for the Future (Rebecca Hosking, 2009)

**Reading: The future of soil and land use in the UK: Soil systems for the provision of land-based ecosystem services (Philip M. Haygarth, Karl Ritz, Land Use Policy 26S, p. 187-197, 2009)**

## WEEK 4

### SEEDS

Overview on seed production, certification schemes and regulation. The Biotechnology and GMO controversy: security and ethical problems. Participatory Plant Breeding (PBB) to strengthen the farmers' capacity to develop varieties.  
Focus on Tuscan legislation and practices on seed protection.

Documentary screening: Seeds of Freedom (Gaia Foundation, 2012)

**Reading: Manifesto on the Future of Seeds (The International Commission on the Future of Food and Agriculture, 2006)**

## WEEK 5

### WATER

The food water footprint and virtual water. Water use, overuse and misuse in agriculture (case studies). Ocean acidification and pollution. How organic agriculture can preserve the quality of drinking water (Munich and New York City case studies).  
Focus on Siena's Bottini as a medieval sustainable water management system.

**Reading: The water needed for Italians to eat pasta and pizza (M.M. Aldaya, A.Y. Hoekstra, Agricultural System 103, p. 351-360, 2010)**

## WEEK 6

### CLIMATE

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 Climate Justice movements' proposals.

Focus on Siena Carbon Free certification.

**Reading: Climate Change and the Food System (Slow Food position paper, 2011)**

**Field-trip: Bottini di Siena**

## WEEK 7

### FOOD WASTE

Food losses and food waste along the food supply chain.

**Reading: Food Wastage Footprint. Impacts on Natural Resources (FAO, 2013)**

**MID-TERM PRESENTATION IN CLASS**

\*\*\*MID-TERM BREAK

## WEEK 8

### ANIMALS

Extensive versus intensive husbandry. Animal welfare. Environmental costs of livestock production. Genetic narrowing. Meat consumption and meat price.

Focus on Cinta Senese breeding.

Documentary Screening: Pig Business (Tracy Worchester, 2009)

**Reading: Environment and Food (Sage, 2012), pages 142-155**

## WEEK 9

### FOOD or COMMODITY?

Innovation and technological changes in food industry: substitutionism and fractionation. The EU quality seals to promote quality foodstuff and EU classification of wines. Introduction to LCA (Life-Cycle Assessment) to measure the environmental

impact of industrial food production (focus on Vernaccia di San Gimignano LCA).  
Documentary screening: The Economics of Happiness (H. Norberg-Hodge, 2011)

**Reading: Stuffed and Starved (Patel, 2011) pag. 222-261**

**FIELD-TRIP: La Fabbrica del Panforte and Spannocchia farm**

## **WEEK 10**

### **WHO IS GOVERNING THE FOOD?**

The concentration of global food supply chain and the consequences on the environment. TTIP (Transatlantic Trade and Investment Partnership) and safety food regulation. The concept of food sovereignty.

Focus on EXPO 2015 in Milan.

**Reading: Peasants Transnational Mobilization for Food Sovereignty in La Via Campesina (Counihan, Siniscalchi, 2014)**

**FIELD-TRIP: Cooperativa Mondomangione**

## **WEEK 11**

### **FEEDING THE CITY**

What do we mean by “local food”? Experiences of urban agriculture, alternative methods of food production and distribution.

Focus on GAS (Gruppi di Acquisto Solidale) network in Siena.

**Reading: Governing for Sustainability (The Worldwatch Institute, 2014, chapters 2 and 3)**

**FIELD-TRIP: Il Mulino Val d'Orcia (organic cereals and pasta producer – to be confirmed)**

## **WEEK 12**

### **SUSTAINABILITY or GREEN WASHING ?**

Critical overview of sustainability policies: “sustainabubble” and limits of green economy. Course review.

## **WEEK 13**

### **FINAL PAPER DUE**

