AG/ES31: Food Systems and Sustainability in Spain
Food Studies & Gastronomy Program
Last updated: September 30, 2019

1. LOCATION: UB, Faculty of Geography and History, room 102
2. MEETING TIME: Mo-Wed 12pm-1:30pm
3. CREDITS: 3
4. INSTRUCTOR: José A. (Tony) Torralba, Ph.D. (torralbajosea@gmail.com)
5. Office hours: by appointment
6. COURSE DESCRIPTION: This course examines theoretical, methodological and practical aspects of sustainable food systems, placing an emphasis on the social, political, economic and environmental contexts that shape and are shaped by those systems. The course employs the production, harvesting, processing, packaging, distribution, storage, transport, marketing, consumption and disposal of food as practical elements from which to understand sustainable food systems. Students will conduct fieldwork and interact with diverse local food agents in Barcelona involved with the processes of the entire food system. This course has a wide range of interest for students, including the fields of environmental sciences, biology, agricultural sciences (ecological and/or conventional), food engineering, sociology, and other natural and social sciences.

7. LANGUAGE OF PRESENTATION: English

8. COURSE OBJECTIVES AND COMPETENCIES:
Upon completion of this course, students will be able to:
1) Describe key concepts related to sustainable food systems.
2) Apply systems thinking tools to the analysis of food systems.
3) Analyze food systems research results and policies for evidence-based assessments and ethical decision-making.
6) Communicate clearly and effectively about food systems through writing and oral presentations in a professional setting of diverse peers.
7) Engage in respectful dialogue, collaborative teamwork, and problem solving with those of differing viewpoints and backgrounds.

9. METHODS OF PRESENTATION:
   a) Class discussion: The course employs in-class discussion as a way to collectively elaborate on issues pertinent to the leading topics found on assigned reading and activities. Students are expected to come to class prepared (i.e. having made and uploaded annotations of assigned reading) and participate actively in the discussions.
   b) Fieldwork & Practical Activities:
      Field visits. Throughout the course, students will conduct two (2) guided (with instructor) visits to different sites in Barcelona to interact with different agents involved with the sustainable food systems. These sites include: a local school lunchroom, and a local food distributor (Ametller Origen). Those visits will take place during class time. During the visits students will conduct observations and interview agents of those sites. Students will generate a 1-2 page assignment as part of conducting those visits, and will then orally present their observations during class time (10 minutes each group).
      Practical Activities. During class time, students will conduct some individual and in-group practical activities involving food. For instance, they will be asked to design a meal following the Mediterranean diet. They will also design a one-week menu based on sustainable foods and in line with the Mediterranean diet. Finally, they will record and analyze their own eating practices during a 24-hour
period using mobile technologies (mobile phones) with the aim of examining various concepts addressed during lectures and reading.

c) **Group project**: Students will form small working groups and conduct a **Final Course Project (FCP)** to examine the *production, harvesting, processing, packaging, distribution, storage, transport, marketing, consumption and disposal* of a particular food or process and present an analysis of its sustainability in *writing* (15-20 pages) as well as *orally* (20 minutes) during the last sessions of the course. The written and oral presentations will follow the format of the template given by the instructor. Each group will distribute the work of documenting and analyzing the processes mentioned above and will coordinate the writing and oral presentation in which the sustainability of such food products/processes is assessed. Students will have an opportunity to work on this project in class at least three (3) times during the course, with the help of instructor. The oral presentation may be done using PowerPoint or the instructor template (Word).

d) **Lectures**: The instructor will provide the main theoretical background of the course through lectures and discussions.

10. **REQUIRED WORK AND FORM OF ASSESSMENT**:

a) **Written Responses to Assigned Reading (WRAR)** (5% each for a total of 15%): During the entire course, each student must prepare **three (3) one-page annotated analyses** of the assigned readings. Annotated analyses must come from different units and be uploaded to the class online platform 12 hours before class meeting. An annotated analysis of a reading includes, your opinion on what the main point of an author is, how s/he supports his/her arguments, what relation(s) the ideas on the paper have with the current or past course content, and a minimum of two question.

b) **Final Course Project (FCP)** (20 %): Students will form and work in small groups to generate a course project on a topic of their choice (within the units of the course). Most of the work will be done outside of class. However, during three (3) sessions, students will work in class and instructor will help groups. The project will be presented *orally* (20 minutes) during the final sessions of the course and a *final written document* (15-20 pages) will be due on session 23. This written document will be structured following the “Template for course Project” given by the instructor. For more details see section 10, point c) above.

c) **Midterm Exam (MTE)**. (30 %): Students will *individually* take a midterm exam during the sixth week to assess their progress on the leading themes of the courses. The exam is composed of 10 short written answers to questions dealing with the topics of the six first units. Students will have 90 minutes to complete the exam.

d) **Field work (FW) and Practical activities (PA)** (20 %): Student will conduct two (2) visits to local sites to document some of the processes addressed during the course. Students will conduct observations, talk with and/or interview agents on those sites, and describe their visit. A 1-2 page analysis of their visit should be turned in within a week of the visit. Instructor will provide a *template or protocol* for observations and interviews to be conducted during field visits. For more details see section 10, point b)
above. They will also conduct three (3) practical activities related to sustainable dishes, menus and eating practices (see section 9b above).

c) Class participation (CP) (15 %): Students are expected to make substantive oral contribution during class lecture or large-class discussion thus showing the assigned reading has been done. When given a task or question to discuss, they should work to make meaningful and course content-driven contributions, ask questions and brainstorm additional ideas. A significant portion of your grade for this class (15 points) is based on participation in class discussions (including your reading and reflection question postings), activities, and the class sessions devoted to the problem-based research project. Participating in this class does not mean talking a great deal. An important part of satisfactory participation in this class is an active role in creating and engaging in a community of learners. It entails building on and synthesizing comments and contributions from others, and showing appreciation for others’ involvement. Some of the most helpful things you can do are to bring a new resource to the classroom, or highlight something interesting and compelling you witness in others.

ATTENDANCE POLICY: Attendance is mandatory for all classes, including course-related trips. Any exams, tests, presentations, or other work missed due to student absences can only be rescheduled in cases of documented medical or family emergencies. If a student misses more than three classes in any course 3 percentage points will be deducted from the final grade for every additional absence. Seven absences in any course will result in a failing grade.

13. COURSE SCHEDULE
<table>
<thead>
<tr>
<th>Session</th>
<th>Topic</th>
<th>Assigned Readings</th>
<th>Assignment due</th>
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<tbody>
<tr>
<td>UNIT 1: INTRODUCTION TO SYSTEMS THINKING, SUSTAINABILITY AND GLOBAL FOOD SYSTEM</td>
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<tr>
<td>Week 1</td>
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<tr>
<td>1 (w1.1)</td>
<td>• Why are we here? What do we expect out of this course?</td>
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<td></td>
<td>• Overview of syllabus, procedures, reading, etc.</td>
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<td>• <em>In-class exercise1</em>: What is our current understanding of the issues? Write, up to one page, on your current understanding of a) systems, b) sustainability, and c) food systems.</td>
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<tr>
<td></td>
<td>• Food systems.</td>
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<td>• In-class exercise: Discuss group course project</td>
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<td>UNIT 2: HEALTHY AND SUSTAINABLE DIETS</td>
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<td>2.1 (w2.1)</td>
<td>• Sustainable diets.</td>
<td><em>biodiversity directions and solutions for policy, research and action</em> [online]: <a href="http://www.fao.org/3/i3004e/i3004e.pdf">http://www.fao.org/3/i3004e/i3004e.pdf</a> (pp. 21-27)</td>
<td>Half-page on proposed course project.</td>
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<td></td>
<td>• What is a Healthy Claim?</td>
<td>Harvard School of Public health, “Healthy Eating Plate”, [online].</td>
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</table>
### 2.2 (w2.2)
- **Impact of consumers’ diets, choices and lifestyles.**
- **In-class exercise (PA1)**
  Mediterranean Recipe (prep-work). Case study: UNESCO Mediterranean Diet


### UNIT 3: BIODIVERSITY, SEASONALITY AND ORGANIC FOOD

### 3.1 (w3.1)
- Definitions
- Biodiversity & Climate change
- Industrial, sustainable and organic food


### 3.2 (w3.2)

- **In-class group Exercise: (PA2) Constructing a local seasonal calendar (plant & animal)**


### Unit 4: WATER AND LAND MANAGEMENT FOOD FOOTPRINTS

| 4.1 (w4.1) | Can we measure sustainability? How? Are there any economic indicators?
| Carbon footprint, water footprint, ecological footprint | FAO. 2011. *The state of the world’s land and water resources for food and agriculture (SOLAW) – Managing systems at risk*. Food and Agriculture Organization of the United Nations, Rome and Earthscan, London. (pp. 30-40)
### UNIT 5: FOOD LOSS AND FOOD WASTE

| 5.1 (w5.1) | Food loss and food waste reduction: definitions and strategies  
Disposal strategy: “the second life of the product”  
Karin Schanes, Karin Dobernig, Burcu Gözet. *Food waste matters - A systematic review of household food waste practices and their policy implications*, Journal of Cleaner Production, Volume 182, 2018, Pages 978-991, ISSN 0959-6526,  

https://www.footprintnetwork.org/resources/footprint-calculator/ |
### UNIT 6: CIRCULAR ECONOMY AND RESILIENCE

#### 6.1 (w6.1)
- Definitions
- Student presentations on local food waste/strategies.
- Circular economy and business opportunities

**EASAC** (2016), *Indicators for a circular economy*, [online]. (pp.9-23)


Korhonen et al., 2018

#### 6.2 (w6.2)
- MID-TERM EXAM

### UNIT 7: LOCAL ECONOMY AND ALTERNATIVE SYSTEMS

#### 7.1 (w7.1)
- Local economy for a sustainable development
- Short food supply chain (SFSC)
- Local food systems for food sovereignty
- Definition of Alternative Food Systems (AFSs)

**Augere-Granier**, M-L, (2016). *Short food supply chains and local food systems in the EU*. EPRS (PE 586.650) (pp. 1-10)

**Diesis** (2016), “*How social enterprises contribute to sustainable food systems*”, [online].(pp. 6-31)

#### 7.2 (w7.2)
- *(FW1) Visit/Interview with Local Food Distributer (Ametller Origen)*

### UNIT 8: ETHIC AND INCLUSIVE FOOD BUSINESS MODELS

| 8.1 (w8.1) | • Social economy enterprises as inclusive food business.  
|            | • Social farming  
|            | Sumner J. (2013), “Good food for all: the role of social economy in sustainable food systems”, OISE/University of Toronto, [online].  
|            | R. Willoughby and T. Gore. (2018). Ripe for Change: Ending human suffering in supermarket supply chains. GROUP1 SECTION 1; GROUP2 SECTION2; GROUP3 SECTION3; GROUP4 SECTION4; INSTRUCTOR SECTION 5  

| 8.2 (w8.2) | • How can be green and social entrepreneur in the same time?  
|            | • Student GROUP project in-class work (FCP2)  

### UNIT 9: FOOD AND CULTURAL HERITAGE

| 9.1 (w9.1) | • The historical, social and cultural importance of food.  
|            | • Food and cultural diversity  
|            | • In-class blog exercise (https://blog.ciat.cgiar.org/origin-of-crops/)  

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<tr>
<th>9.2</th>
<th>PA3. Self monitoring of eating. Reports Students work on FCPw3</th>
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**UNIT 10. FOOD IN SCHOOLS: SUSTAINABILITY & FOOD HERITAGE**

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<tr>
<th>(W10.1)</th>
<th>Schools as FOODSCAPES Children Food Heritage (TEACHING AND LEARNING) Sustainability in school meals</th>
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<tbody>
<tr>
<td></td>
<td>Marije Oostindjer, and et al. (2017) Are school meals a viable and sustainable tool to improve the healthiness and sustainability of children’s diet and food consumption? A cross-national comparative perspective, Critical Reviews in Food Science and Nutrition, 57:18, 3942-3958</td>
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<tr>
<th>(W10.2)</th>
<th><em>(FW2) Visit to School Lunchroom</em></th>
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**UNIT 11. STUDENT GENERATED TOPIC (TBA)**

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<tr>
<th>(W11.1)</th>
<th>2 LEADING CONCEPTS AND/OR TOPICS WILL BE SELECTED BY STUDENTS TO DISCUSS.</th>
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<tbody>
<tr>
<td></td>
<td>READING WILL BE SELECTED BY STUDENTS</td>
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| (W11.2) | Student prepare FCP presentations |

**UNIT 12. COURSE SUMMARY**
14. TEMPLATES AND GUIDE TO ASSIGNMENTS.

1. **Written Responses to Assigned Reading (WRAR).** For each of your three (3) responses to assigned readings try to do a critical reading of the chosen article. This means that at a minimum you should read the article and respond in writing to the article with the following questions in mind (you may use these questions as an outline):
   a. what is the main point or thesis of an author?
   b. how does s/he support his/her arguments?
   c. how do the ideas on the paper relate to current or past class discussions?
   d. What do I feel is missing from this article?
   e. Two questions I have about this article.

2. **Final Course Project (FCP).** Executing a research project involves a “systematic” process (that is why we call it “research”) of organization to allow us to communicate our research in specific ways (a product) to speak to certain audiences. Research communities in the natural or social sciences have, through time, designed and come to collective agreements on how to go about doing and reporting their research. The outline or structure offered on this course can be viewed as one of those ways of doing research. The outline (a file named, Template for a Course Project.doc) can be accessed on the course online platform.

3. **Field Work (FW).**
   a. preparing for filed work (field work plan). Two week before each visit, instructor will describe the site to be visited and the logistics of the visit. One week before that visit, decide what process or issue you will concentrate on and write a very brief (50 words) explanation of your interest on that process or issue (this will guide your observations). Instructor will respond in writing to you plan, directing you to the tools and/or methods to use during your visit.
   b. conducting the filed work. Make sure you have your tools ready for doing the planned fieldwork. For instance, if your are doing observations, have a plan for what you will observe and for how long; if interviews, have your questions written down; if audio/video will be employed, make sure you know how to employ these tools and what you will capture with them. During your fieldwork, your attention should be on the person or process you have chosen.
   c. reporting filed work activities. Right after your visit, find a time to sit down and write some brief notes on what you saw. Later on, employ your collected data (audio, video, text) to expand on your notes. That means that you will expend some time going over your data to illustrate and expand (in writing) your perception of what was more important for you during the visit. Use this expanded description to produce a 1-2 page document that
reports on a) what you have learnt about the visit, and b) how what you have learned relates to the issues discussed in class.

16. BIBLIOGRAPHY