N327 - Food Systems and Sustainable Diets - Fall 2018

**Time:** Thursdays from 1:30 PM – 4:30 PM.

**Instructor:** Hugh Joseph - hjoseph@tufts.edu

**Course summary:**

[Note: The fall 2018 course is substantially modified from 2017 to cover more topics of current importance across food systems and sustainability research and practice landscapes].

Perspectives on food systems and diets will cover of social, economic, governance, health, culture, and environmental dimensions. Systems-based, multi-disciplinary approaches explain key issues from holistic perspectives. Topics include biodiversity, climate change, local food systems, food waste, livestock/meat; literacy; oceans & seafood; water and beverages; sustainable dietary guidelines. A particular emphasis are sustainable diets and dietary guidance. How can food consumption serve as a critical change model for producing a more sustainable food system?

The course emphasizes active class participation, including student-led presentations and group activities designed to build skills in applying sustainability and food system concepts to real-world situations. Assignments will focus on understanding the interplay of multiple facets of sustainable food systems, and how to navigate their complexities to produce practical outcomes in domains such as public policy, agricultural and food industry practices, public health nutrition, NGO advocacy, and communications.

There are no course prerequisites, but as an advanced course, first year students should have reasonable background in food systems education and/or experience. If unsure, please contact the instructor or enroll and come to the first class to evaluate your readiness for it.

**Course Learning Objectives:**

- Analyze food systems in terms of their interlinked components - including agriculture, processing, distribution and consumption – with broader socio-economic, environmental and cultural aspects of human diets.
- Apply systems-based and multi-disciplinary approaches to assess contemporary sustainability-related policies and practice.
- Using these approaches, address specific aspects of food systems sustainability, such as waste, climate change, biodiversity, food security, resource use, and global pollution.
- Connect diets / food consumption to overall food systems sustainability, including economic, ecology, food justice, and animal welfare concerns.
- Formulate approaches to developing practical guidance for sustainable diets in varied settings and contexts – institutions, food service, education, government, and NGOs.
Weekly overview: Classes are 3 hours (Thursdays, 1:30 PM - 4:30 PM) and will generally include the following:

(a) Interactive lectures on specific food system topics (see weekly summaries).
(b) Overviews of systems, systems thinking, sustainability, food systems, sustainable diets, ethics, framing, etc.
(c) Group exercises where students apply these themes to food supply chains and sustainable diets in terms of assessments, policies, and/or practices.
(d) In-class discussions on students’ selected topics (see list below).
(e) Readings: Weekly readings will incorporate the following:
   • Assigned articles or book chapters - typically two or three each week.
   • Additional student selected reading for class discussion.
   • Students may also review additional literature for their weekly assignments and major papers.

Assignments:

A. Weekly mini-assignments: On many weeks, there will be short written assignments covering the major themes, and/or exercises to be used as part of class instruction.

B. Major paper: Papers will comprise a sustainable systems-based assessment, incorporating tools, techniques, and insights covered throughout the course, resulting in an applied example of food systems / diets interactions, to synthesize some of the complexities of food systems and sustainability, and to apply this to potential policy, education, or practice settings.

Topics for student-led class discussions: Many applied aspects sustainable food systems – supply chains and diets - will be addressed via weekly readings and paper topics, based on student selections. These can include:

<table>
<thead>
<tr>
<th>Agroecology</th>
<th>Food rights</th>
</tr>
</thead>
<tbody>
<tr>
<td>Climate change</td>
<td>Food security / food access</td>
</tr>
<tr>
<td>Community / regional food systems</td>
<td>Labor and food justice</td>
</tr>
<tr>
<td>Fair trade</td>
<td>Nutrition and personal health</td>
</tr>
<tr>
<td>Food industry / food processing</td>
<td>Obesity and health</td>
</tr>
<tr>
<td>Food marketing</td>
<td>Organic production</td>
</tr>
<tr>
<td>Food quality / taste</td>
<td>Oceans and waterways</td>
</tr>
<tr>
<td>Food rights</td>
<td>True cost of food</td>
</tr>
</tbody>
</table>

Grades are based on three categories:

A. Weekly assignments and exercises: 40%
B. Major paper: 50%
C. Class participation - includes consistent and timely class attendance, completing required readings on time, preparation for class discussions, and active in-class involvement: 10%

Grading of assignments will typically incorporate a rubric and comments.
**Weekly Syllabus Summary**

**Weekly class content** is divided into three categories. We will cover:

**9-6: Week 1**

**Presentation topics:**
Major: Food systems – concepts / history / terminologies  
Minor: Systems and systems thinking – 1  
Course overview

**9-13: Week 2**

**Presentation topics:**
Major: Sustainability and food systems  
Minor: Systems and systems thinking - 2  
Students’ topic: TBA

**9-20: Week 3**

**Presentation topics:**
Major: Sustainable diets  
Minor: Food systems thinking  
Students’ topic: TBA

**9-27: Week 4**

**Presentation topics:**
Major: Foodprints / Lifecycle analysis (LCA)  
Minor: Meta-systems ecologies  
Students’ topic: TBA

**10-4: Week 5**

**Presentation topics:**
Major: Sustainable food production / agriculture  
Minor: Scale across food systems  
Students’ topic: TBA

**10-11: Week 6**

**Presentation topics:**
Major: Biodiversity  
Minor: Food systems literacy  
Student topic: TBA
10-18: Week 7

Presentation topics:
Major: Local food systems
Minor: Worldviews and sustainability
Students’ topic: TBA

10-25: Week 8

Presentation topics:
Major: Values / ethics for sustainable food systems
Minor: Food systems – multi-criteria analysis (MCA)
Students’ topic: TBA

11-1: Week 9

Presentation topics:
Major: Waste across the food systems
Minor: Right to food
Students’ topic: TBA

11-8: Week 10

Presentation topic(s):
Major: Sustainable Dietary guidance and guidelines
Minor: Nutritionism
Students’ topic: TBA

11-15: Week 11

Presentation topic(s):
Major: Beverages and sustainability
Minor: Framing food systems and sustainability concepts
Students’ topic: TBA

11-29: Week 12

Presentation topic(s):
Major: Livestock / meat consumption
Minor: Sustainability indicators – tracking change
Students’ topic: TBA

12-6: Week 13

Presentation topic(s):
Students’ major paper presentations