

## N327 - Food Systems and Sustainable Diets - Fall 2020

**Times:** Wednesdays and Thursdays from 3:15 PM – 4:45 PM.  
Delivery (e.g., in person and/or synchronous) TBA

**Instructor:** Hugh Joseph - [hjoseph@tufts.edu](mailto:hjoseph@tufts.edu)

### **Course summary:**

In this course, sustainable food systems and sustainable diets are approached using systems-based, multi-disciplinary models that incorporate social, economic, governance, health, cultural, and environmental dimensions. Topics covered will include biodiversity, climate change, local food systems, food waste, livestock/meat; oceans & seafood; water and beverages. A particular emphasis for sustainable diets is dietary guidance; specifically, examining how overall food consumption can reflect and also drive change across the entire food supply chain. An innovative methodology - multi-criteria assessment - is introduced as a tool to tailor food consumption recommendations in ways that reflect diverse values and sustainability priorities.

This course emphasizes active class participation, including student-led presentations and group-based 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.

### **Course Learning Objectives. By taking this course, students will be able to:**

- 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.
- Explain key concepts related food system terminologies, including ‘sustainable’, ‘food miles’, ‘footprints’, ‘local’, ‘green’, ‘organic’, and more effectively use of language and framing in food systems discourse.
- 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.
- Apply assessment tools to compare the sustainability of various foods and diets.
- Formulate 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).

**Readings: Weekly readings will incorporate the following:**

- Assigned articles or book chapters - typically two or three each week.
- An additional student-selected reading for class discussion.
- Students will also review additional literature for their weekly assignments and major paper.

**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 discussions.

**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. In 2018, most students compared two or more foods or food systems strategies, including multi-criteria assessments.

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

- |                                   |                               |
|-----------------------------------|-------------------------------|
| Agroecology                       | True cost of food             |
| Climate change                    | Food security / food access   |
| Community / regional food systems | Labor and food justice        |
| Fair trade                        | Nutrition and personal health |
| Food industry / food processing   | Obesity and health            |
| Food marketing                    | Organic production            |
| Food quality / taste              | Oceans and waterways          |
| Food rights                       | Fish and other seafood        |

**Grades** are based on three components:

- 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%

**Weekly Syllabus Summary:** (Note: 2019's detailed weekly syllabus is available by request to instructor – [hugh.joseph@tufts.edu](mailto:hugh.joseph@tufts.edu)).

**Week 1**

**Key themes:**

- Course overview
- Food systems - concepts and models
- Food systems - history / terminologies

**Week 2****Key themes:**

- Sustainability
- Sustainable food systems
- Organics

**Week 3****Key themes:**

- Sustainable diets
- Food security and sustainability
- Food systems thinking

**Week 4****Key themes:**

- Sustainable food consumption (vs. diets)
- Footprints / lifecycles

**Week 5****Key themes:**

- Environmental footprints
- GMOs

**Week 6****Key themes:**

- Sustainable agriculture
- Sustainability of beverages
- Food justice - fair trade

**Week 7****Key themes:**

- Localism
- Sustainability and food service / restaurants

## **Week 8**

### **Key themes:**

- Focal and regional food systems
- Oceans and seafood

## **Week 9**

### **Key themes:**

- Multi-criteria assessment
- Food system ethics
- Food as a commons

## **Week 10**

### **Key themes:**

- Sustainability assessments
- Food justice

## **Week 11**

### **Key themes:**

- Sustainability assessments (continued)
- Sustainable dietary guidelines (SDG)
- True cost of food

## **Week 12**

### **Key themes:**

- Food systems - waste and losses
- Sustainable dietary guidelines (SDG)
- Animal welfare

## **Week 13**

### **Key themes:**

- Student major paper presentations