Class meeting: Online
Instructors: Robert Guillemin
Instructor, Sustainable Supermarket Lead, US EPA
robert.guillemin@tufts.edu or 617-918-1814
Skype: guillemins4

Natalie Valpiani
Instructor, Food Policy and Nutrition Research Consultant
natalie.valpiani@tufts.edu or 763-213-4604
Skype: nvalpiani

Office Hours Phone conversations can be arranged as needed
Credit awarded: 1 credit
Prerequisites: None

Course Description: Food businesses (the companies that process, manufacture, distribute, serve, and sell food) transform the very nature of what we eat and establish the economic, social and environmental terms that shape much of the food system. This course examines the dominant food system, exploring its undesirable outcomes and the emerging opportunities to feed a growing population in a manner that is reliable, equitable, healthy, and sustainable. Students will learn about industry-led initiatives that attempt to balance the drive for profits with their social and environmental goals. We will also explore how governments, nonprofit organizations, and communities are trying to reshape the food system. To provide context, the course reviews such topics as food system policy, environmental impacts, nutrition, public health, and food equity.

Course Objectives: Upon completion of this course students will be able to:

- Define sustainability in the context of food processing, distribution, and retail.
- Describe the purposes, functions and impacts of the dominant food system (transportation, processing, and retail/institutional formats).
- Identify the leading and emerging sustainability initiatives and strategies that apply to the “middle of the food system.”
- Explain the roles and relationships of important stakeholders (business, advocacy groups, institutions and government agencies).
- Evaluate the economic, social, and technical barriers and trade-offs that challenge a sustainable food system.
• Apply important contextual concepts, including historical, theoretical and technical insights, to analyze and evaluate the course material.
• Consider solutions for improving the way food is processed, distributed, or sold.

Course Materials: Required readings are available online through the course website on Trunk, the Tufts University course management system. You are required to purchase Introduction to the U.S. Food System: Public Health, Environment, and Equity edited by Roni Neff, published by Jossey-Bass. The book can be purchased on the publisher’s website (http://www.wiley.com/WileyCDA/WileyTitle/productCd-1118063384,miniSiteCd-JBPUBLICHEALTH.html) or on Amazon.com and Barnesandnoble.com. The textbook is available as a new, used, rented, or e-book. Students based in Boston can also use the reserve room copy at the Hirsh Library on our Health Sciences campus.

Academic Conduct: The Tufts University official policy holds that academic integrity, including avoiding plagiarism, is critically important. Each student is responsible for being familiar with the standards and policies outlined in the Friedman School’s Policies and Procedures manual: http://nutrition.tufts.edu/student/documents. It is the responsibility of the student to be aware of, and comply with, these policies and standards. In accordance with Tufts University’s policy on academic misconduct, violations of standards of academic conduct will be sanctioned by penalties ranging from grade reduction or failure on an assignment; grade reduction or failure of a course; up to dismissal from the school, depending on the nature and context of any infraction: http://uss.tufts.edu/studentaffairs/judicialaffairs/Academic%20Integrity.pdf.

The material you submit to show mastery of the course material must be your own work. We take proper academic conduct seriously, as it is unfair to other students when academic misconduct is not addressed. The policy followed here is quite simple: any proven plagiarism or cheating will result in a failing grade for the assignment and the entire course, and all violations will be reported to the Dean for Academic Affairs.

Communication: The instructors use email as the main form of communication and are also available by Skype during office hours to answer any questions. You will receive email replies within a day, but please do not expect instant replies. Classmates may also be contacted if there are questions about assignments and due dates.

Diversity Statement: It is our intent that students from all diverse backgrounds and perspectives be well served by this course, that students’ learning needs to be addressed both in and out of class, and that the diversity that students bring to this class be viewed as a resource, strength and benefit. It is our intent to present materials and activities that are respectful of diversity: gender, sexuality, disability, age, socioeconomic status, ethnicity, race, and culture. Your suggestions are encouraged and appreciated. Please let us know ways to improve the effectiveness of the course for you personally or for other students or student groups. In addition, if any of our class assignments conflict with your religious events, please let me know so that we can make arrangements for you.
Course Assignments and Grading Criteria:

<table>
<thead>
<tr>
<th>Assignments</th>
<th>Grading Weight</th>
</tr>
</thead>
<tbody>
<tr>
<td>Introductory Statement</td>
<td>5%</td>
</tr>
<tr>
<td>5 Quiz Assignments (6% each)</td>
<td>30%</td>
</tr>
<tr>
<td>1 Online Discussion Leader Article</td>
<td>16%</td>
</tr>
<tr>
<td>4 Online Discussion Responses (6% each)</td>
<td>24%</td>
</tr>
<tr>
<td>Final Paper Outline</td>
<td>5%</td>
</tr>
<tr>
<td>Final Paper</td>
<td>20%</td>
</tr>
<tr>
<td><strong>Total:</strong></td>
<td><strong>100%</strong></td>
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**Introductory Statement:** The course begins with a 1-2 page Introductory Statement (250 to 500 words) that allows students to introduce themselves, highlight their interests and concerns about the food system, and explain why they are taking the course. The assignment is worth 5% of the course grade. *The Introductory Statement is due on Sunday, January 20 by 11:59 pm (EST).*

**Grading Rubric: Introductory Statement**

<table>
<thead>
<tr>
<th>Components</th>
<th>Expected Level of Competence</th>
<th>Moving Towards Expected Level of Competence</th>
<th>Below Expected Level of Competence</th>
</tr>
</thead>
<tbody>
<tr>
<td>Submission posted on time</td>
<td>Complete and submit memo on time.</td>
<td>Post is submitted late.</td>
<td>Post is not submitted</td>
</tr>
<tr>
<td>Style guidelines</td>
<td>Adheres to word limit. Writing is clear and succinct. Demonstrates care in writing, which may be informal, but thoughtful. The post has a smooth flow of ideas and is well organized and logical.</td>
<td>Does not adhere to word limit (250-500 words). Writing lacks clarity in some places. Flow of ideas could use some improvement.</td>
<td>Post is below 250 words in length, is difficult to understand, and does not introduce the student’s interests or reasons for taking the course.</td>
</tr>
</tbody>
</table>

**Quiz Assignments:** Students will complete 5 quiz assignments, each worth 6%, or 30% of the total course grade. These assignments will require students to apply and practice the concepts and ideas discussed during the week’s readings and lectures, primarily from the course textbook. Assignments will include short answer, multiple choice, fill in the blank, and true/false questions. *Quiz answers are due on designated Sundays at 11:59 pm (EST).*

**Online Discussion Leader Article:** Students will select one of five dates to submit a Discussion Leader Article, worth 16% of the entire course grade. The article presents an opinion or insight that initiates an online discussion among classmates. In addition to using course materials, the article must cite peer-reviewed and/or grey literature (i.e. periodicals,
reports from government or non-government agencies). The instructors will provide a prompt question to help develop the discussion article and guide the following responses. The article is between 2-3 pages (500 and 750 words). **Discussion Leader articles must be posted on designated Thursday evenings by 11:59 pm (EST).**

**Grading Rubric: Discussion Leader Article**

<table>
<thead>
<tr>
<th>Components</th>
<th>Expected Level of Competence</th>
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<th>Below Expected Level of Competence</th>
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</tr>
<tr>
<td><strong>Style guidelines</strong></td>
<td>Adheres to word limit. Writing is clear and succinct. Demonstrates care in writing, which may be informal, but thoughtful. The post has a smooth flow of ideas and is well organized and logical.</td>
<td>Does not adhere to word limit (500-750 words). Writing lacks clarity in some places. Flow of ideas could use some improvement.</td>
<td>Does not adhere to word limit (500-750 words). Writing lacks clarity throughout. Flow of ideas is rough. Post is not well organized.</td>
</tr>
<tr>
<td>Demonstrates careful reading &amp; listening to lecture material</td>
<td>Demonstrates serious contemplation of the readings and lectures. Shows original thought that goes beyond the obvious.</td>
<td>Demonstrates reading was completed/lecture was watched, but relies primarily on summary rather than integration of information.</td>
<td>Gives little indication that reading/lecture viewing was completed.</td>
</tr>
<tr>
<td>Application of theories/concepts to consumer behavior</td>
<td>Articulates strengths and limitations of theory’s application to professional context. Elaborates statements with accurate explanations, reasons, or evidence.</td>
<td>Provides general discussion of theory’s application but lacks thoughtful critique. Takes a position with respect to theory application but with little evidence or explanation. Examples to support points are not well integrated or not effective.</td>
<td>Missing or limited theory application. Little evidence used to support points or evidence is out of context.</td>
</tr>
</tbody>
</table>

**Online Discussion Responses:** Students will submit at least four online discussion responses, worth 6% each, or a total of 24% of the total course grade. The responses comment on the Discussion Leader articles and/or other online responses. The responses help deepen the nature of the online class discussion by introducing new ideas and insights, raising questions, and posing opinions. Student are not required to provide online responses the week they submit a Discussion Leader article, however, all extra responses will be applied as extra credit. **Response posts are due on designated Sunday evenings by 11:59 pm (EST).**
Grading Rubric: Online Discussion Responses

<table>
<thead>
<tr>
<th>Components</th>
<th>Expected Level of Competence</th>
<th>Moving Towards Expected Level of Competence</th>
<th>Below Expected Level of Competence</th>
</tr>
</thead>
<tbody>
<tr>
<td>Quantity &amp; timeliness of contributions</td>
<td>Reads the messages in the discussion area. Contributes 4 or more constructive responses to discussion post over the entire course.</td>
<td>Reads some of the messages in the discussion area. Contributes 2-3 constructive responses to discussion posts over the entire course.</td>
<td>Does not read messages in discussion area and does not contribute any constructive responses to discussion posts over the course of the semester.</td>
</tr>
<tr>
<td>Quality &amp; relevance of response</td>
<td>Responses are concise, clear, and thoughtful. Responses contribute something original or build upon what has been said; they are not repetitious.</td>
<td>Responses are related to the discussion posts, but messages only address peripheral issues. Repetition of questions or points made by others.</td>
<td>Responses do not relate to the discussion posts. Makes, short, irrelevant remarks or responds with minimum effort.</td>
</tr>
<tr>
<td>Interaction with others</td>
<td>Questions are raised to stimulate discussion. Encourages a variety of viewpoints. Responds to questions and comments from others. When disagreeing, does so respectfully.</td>
<td>Participation is evident, but posts do not engage in a dialog or encourage others to think critically.</td>
<td>Rarely raises questions to stimulate discussion and rarely responds to the questions and comments raised by others. Comments are unconstructive or non-courteous.</td>
</tr>
</tbody>
</table>

Final Paper Outline: To help prepare students for the Final Paper, students will submit a 1-2 page outline. As described below, the Final Paper critiques a product, technology, program or company that is designed to promote a healthy, sustainable, and/or ethical food system. The paper should introduces the subject, describes its benefits, questions its feasibility, and makes predictions or recommendations. The Outline needs to include the following elements.

- **Introductory paragraph (2-5 sentences):** Start the first paragraph by explain the paper’s topic as well as its relevance and importance to a sustainable food system.
- **Thesis statement (1-2 sentences):** At the end of the introductory paragraph, include a thesis statement that proposes the purpose or goal of the paper. Be sure to present your opinion or assertion in relation to the topic. The thesis statement helps guide the writing process by keeping the main argument focused and on track throughout the paper.
- **Paper outline (1 page):** This list of bulleted statements constitutes the body of the paper by highlighting the main points in a logical sequence.
- **Conclusion (1 paragraph):** Briefly summarize the paper’s main points and conclusion that restates and supports the thesis statement.
- **References:** Include a preliminary list of source materials, which can include course readings, peer-reviewed publications, and/or grey literature (i.e. periodicals, reports from government or non-government agencies).
Examples of paper outlines can be found at: https://academicguides.waldenu.edu/writingcenter/writingprocess/outlining

*The Final Paper Outline is due on Sunday, March 31 by 11:59 pm (EST).*

**Grading Rubric: Final Paper Outline**

<table>
<thead>
<tr>
<th>Components</th>
<th>Expected Level of Competence</th>
<th>Moving Towards Expected Level of Competence</th>
<th>Below Expected Level of Competence</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Submission and Page Limit</strong></td>
<td>Outline submitted on time and includes all the required elements within the 1-2 page limit. Four or more sources cited.</td>
<td>Outline is submitted late and/or does not contain required elements or adhere to the 1-2 page limit. 1-2 sources cited.</td>
<td>Outline is not submitted.</td>
</tr>
<tr>
<td><strong>Format guidelines</strong></td>
<td>Writing is clear, logical and well organized.</td>
<td>Writing lacks clarity in some places. Connection of ideas could use some improvement.</td>
<td>The outline lacks clarity throughout. Flow of ideas is rough.</td>
</tr>
<tr>
<td><strong>Contemplation and Analysis</strong></td>
<td>Outline demonstrates serious contemplation and analysis that includes relevant insights, concepts, and challenges derived from course materials and lectures.</td>
<td>Demonstrates research but there is a lack of inquiry and analysis that probes deeper into areas of complexity and nuance.</td>
<td>Gives little indication that research was completed or efforts were made understand the topic.</td>
</tr>
</tbody>
</table>

**Final Paper:** Students will have the chance to demonstrate mastery of the course materials as they craft a final paper. The paper critiques a product, technology, program or company that is designed to promote a healthy, sustainable, and/or ethical food system. The paper should introduce the subject, describes its benefits, questions its feasibility, and makes predictions or recommendations. It should be 4-5 pages in length (1,000-1,250 words), not including references.

*The Final Paper is due Sunday, April 22 at by 11:59 pm (EST)*

**Grading Rubric: Final Paper**

<table>
<thead>
<tr>
<th>Components</th>
<th>Expected Level of Competence</th>
<th>Moving Towards Expected Level of Competence</th>
<th>Below Expected Level of Competence</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Submission and Page Limit</strong></td>
<td>Paper submitted on time and adheres to page limit. 4 or more sources cited.</td>
<td>Article is submitted late and/or does not adhere to page limit. One or two sources cited.</td>
<td>Article is not submitted.</td>
</tr>
<tr>
<td><strong>Style guidelines</strong></td>
<td>Writing is clear, logical and well organized.</td>
<td>Writing lacks clarity in some places. Flow of ideas could use some improvement.</td>
<td>Writing lacks clarity throughout. Flow of ideas is rough.</td>
</tr>
<tr>
<td>----------------------</td>
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<td>-------------------------------------------------</td>
</tr>
<tr>
<td><strong>Contemplation and Analysis</strong></td>
<td>Paper demonstrates serious contemplation and analysis that includes relevant insights, concepts, and challenges derived from course materials and lectures.</td>
<td>Demonstrates research by answering questions but there is a lack of inquiry and analysis that probes deeper into areas of complexity and nuance.</td>
<td>Gives little indication that research was fully completed. Questions are not posed or answered.</td>
</tr>
</tbody>
</table>

**Assignments and Submission Instructions:** All homework assignments should be uploaded to Canvas in your assignment dropbox by the specified deadline. Online Discussion Leader articles and responses are to be posted to the class Discussion forum on Canvas. Assignments received after their deadline will not be accepted or graded unless an extension is approved in advance of the due date. Students who are unable to complete an assignment or exam on time for any reason should notify either Rob or Natalie by email as soon as possible, and at least 48 hours prior to the deadline, with a brief explanation for why the extension is needed. Deadlines for each assignment are listed in the Course Calendar below.

**Accommodation of Disabilities:** Students with documented disabilities are entitled to reasonable academic accommodation appropriate to their needs. If you require accommodations for this course, contact Rob or Natalie confidentially prior to the end of the second week of classes.
# COURSE CALENDAR
Note: This schedule is subject to modification at the discretion of the instructors.

<table>
<thead>
<tr>
<th>Dates</th>
<th>Week</th>
<th>Topic</th>
<th>ASSIGNMENTS &amp; ACTIVITIES</th>
<th>ASSIGNMENT DUE DATES</th>
<th>LECTURERS &amp; GUESTS SPEAKERS</th>
</tr>
</thead>
<tbody>
<tr>
<td>1/16 - 1/20</td>
<td>1</td>
<td>Introduction to course and overview of Food System and Markets</td>
<td>Readings</td>
<td>Introductions: Post in Discussion Forum by 1/20 at 11:59pm EST</td>
<td>Rob Guillemin</td>
</tr>
<tr>
<td>1/21 - 1/27</td>
<td>2</td>
<td>Policies that Shape the Food System</td>
<td>Readings</td>
<td>None</td>
<td>Rob Guillemin Natalie Valpiani</td>
</tr>
<tr>
<td>1/28 - 2/3</td>
<td>3</td>
<td>Crop and Food Animal Production</td>
<td>Readings and Online Discussion #1</td>
<td>Article: 1/31 at 11:59pm EST Response: 2/3, 11:59pm EST</td>
<td>Rob Guillemin</td>
</tr>
<tr>
<td>2/4 - 2/10</td>
<td>4</td>
<td>Environmental and Public Health Effects</td>
<td>Readings and Quiz #1</td>
<td>Quiz answers: 2/10, 11:59pm EST</td>
<td>Natalie Valpiani</td>
</tr>
<tr>
<td>2/11 - 2/17</td>
<td>5</td>
<td>Food Environment, Food Access, and Nutrition</td>
<td>Readings and Online Discussion #2</td>
<td>Article: 2/14, 11:59pm EST Response: 2/17, 11:59pm EST</td>
<td>Natalie Valpiani Jen Obadia</td>
</tr>
<tr>
<td>2/18 - 2/24</td>
<td>6</td>
<td>Food Distribution and Transport</td>
<td>Readings and Quiz #2</td>
<td>Quiz answers: 2/24, 11:59pm EST</td>
<td>Rob Guillemin</td>
</tr>
<tr>
<td>2/25 - 3/3</td>
<td>7</td>
<td>Food Processing and Packaging</td>
<td>Readings and Online Discussion post #3</td>
<td>Article: 2/28, 11:59pm EST Response: 3/3 11:59pm EST</td>
<td>Rob Guillemin</td>
</tr>
<tr>
<td>3/4 - 3/10</td>
<td>8</td>
<td>Regional Food Hubs and Food Security</td>
<td>Readings and Quiz #3</td>
<td>Quiz answers: 3/10 11:59pm EST</td>
<td>Natalie Valpiani</td>
</tr>
<tr>
<td>3/11 - 3/17</td>
<td>9</td>
<td>Supermarkets and Alternative Retail Formats</td>
<td>Readings and Online Discussion #4</td>
<td>Article: 3/14, 11:59pm EST Response: 3/17, 11:59pm EST</td>
<td>Rob Guillemin</td>
</tr>
<tr>
<td>3/18 - 3/24</td>
<td>10</td>
<td>Direct to Consumer</td>
<td>Readings and Quiz #4</td>
<td>Quiz answers: 3/24, 11:59pm EST</td>
<td>Natalie Valpiani</td>
</tr>
<tr>
<td>4/1 - 4/7</td>
<td>12</td>
<td>Farm to Institutions</td>
<td>Readings and Online Discussion #5</td>
<td>Article: 4/4, 11:59pm EST Response: 4/7, 11:59pm EST</td>
<td>Rob Guillemin</td>
</tr>
<tr>
<td>4/8 - 4/14</td>
<td>13</td>
<td>Wasted Food</td>
<td>Readings and Quiz #5</td>
<td>Quiz answers: 4/14, 11:59pm EST</td>
<td>Rob Guillemin</td>
</tr>
</tbody>
</table>

**Conclusion**
Key Concepts

**Week 1: Introduction and Overview of Food System and Markets**

Welcome to NUTC-262, Sustainable Food Systems and Markets! This week's lectures, reading/viewing materials, and assignment will introduce you to the course, to the concept of a sustainable food system, and to each other. The introductory lecture will provide an overview of the syllabus, course topics, and expectations.

**Assignment:**
Introduce yourself in the discussion forum by 11:59 p.m. EST on 1/20.

**Learning Objectives**
- Review the requirements of the course from start to finish.
- Explore the definition of a “sustainable food system” and offer useful perspectives that clarify its meaning.
- Discuss why the industrial “middle of the food system” is relevant to sustainability.
- Provide a broad overview of the US food system, including its elements, characteristics and relationships.
- Explain a “systems” approach to understanding the food system.
- Examine how the food system embodies complexities that are characterized by the term “wicked problems.”
- Identify how to gauge the level of a company’s sustainability commitment.
- Review the regulatory underpinnings of the industrial food system.

**Lectures**
- Course Introduction - Guillemin (6:48)
- Defining Sustainable Food Systems (SFS) - Guillemin (8:12)
- Why the Middle of the Food System Matters - Guillemin (7:40)
- Wicked Problems and the Food System - Guillemin (4:53)
- System Thinking Approach - Guillemin (13:02)
- Assessing Sustainability Commitment in the Food Industry - Guillemin (13:17)
Required Reading and Viewing

Food System Insights
- *Introduction to the U.S. Food System*, Chapter 1: Food Systems

Food Regulations
- Video: The History of Food Regulations (5:06): [https://www.youtube.com/watch?v=1y-VeZ2YPYI](https://www.youtube.com/watch?v=1y-VeZ2YPYI)

Sustainable Business Reporting Methods and Management Systems
- Video: Bob Massie: Measuring Sustainability Disclosure (Global Reporting Initiative) (3:30): [https://www.youtube.com/watch?v=aVMqD4CKL50](https://www.youtube.com/watch?v=aVMqD4CKL50)
- Video: ISO 14000 - Environmental management (4:29): [https://www.youtube.com/embed/_hs54V3x1VQ?fs=1&autoplay=1&rel=0](https://www.youtube.com/embed/_hs54V3x1VQ?fs=1&autoplay=1&rel=0)
- Global Reporting Initiative Standards: [https://www.globalreporting.org/standards](https://www.globalreporting.org/standards)

Supplementary Material
- How to Start a Food Business, U.S. Food and Drug Administration: [http://www.fda.gov/Food/ResourcesForYou/Industry/ucm322302.htm](http://www.fda.gov/Food/ResourcesForYou/Industry/ucm322302.htm)

Understanding the Dominant Food System

**Week 2: Policies that Shape the US Food System**
In week 2, we discuss food policy mechanisms, drivers, and stakeholders. This includes the perspectives of food activists, government agencies, and food businesses.
Assignment
None

Learning Objectives
● Become familiar with a brief history of food and agriculture policy in the United States.
● Describe the process for policy proposals to become legislation and then receive federal funding.
● Appreciate the role of alliances, stakeholders, and other political factors in policy change.
● Identify ways food system policies can affect price and thus shape of the food system.
● Understand food systems policies as critical drivers of public health and health disparities.
● Explore the term “Food Politics,” including the interests and tensions between key stakeholders.
● Hear the opinions of state and local stakeholders, including a food association president and a local activist.

Lectures
● Overview: Policy and Agenda Formation - Valpiani (12:06)
● Policy Nuts and Bolts: Federal Legislative Process - Valpiani (6:51)
● Policy Nuts and Bolts: Federal Appropriations Process - Valpiani (7:20)
● Policy Nuts and Bolts: Federal Rulemaking Process - Valpiani (9:59)
● Food Policy Councils - Valpiani (9:53)
● Interview with Chris Flynn, president of the Mass Food Association - Guillemin (7:40)
● Interview with Clint Richmond, Plastic Bag Ban Activist in Boston - Guillemin (12:40)

Required Reading and Viewing
● Introduction to the U.S. Food System, Chapter 8: Policies that Shape the US Food System (p. 185-213)
● Robert Paarlberg ((2010). Food Politics: What Everyone Needs to Know. Chapter 1: Overview of Food Politics (p. 1-7). Note: This chapter provides a concise definition of food politics, including the tensions between rural and urban, and local and global interests and roles played by key food system stakeholders.
https://drive.google.com/open?id=1FEXmaFb-KKeHlvLxK_S8wEK-gcZJZY54
● Marion Nestle (2013). Food Politics: How the Food Industry Influences Nutrition and Health (Tenth Anniversary Edition). Introduction: The Food Industry and "Eat More" (p. 1-28). Note: The tenth edition of this food policy classic is well documented, first-hand account of the author's encounter with how the food industry advances its interests. This chapter provides an overview the book's underlying public health concern; the food
industry's drive to make people eat more:
https://drive.google.com/open?id=1wps0zcgofoL81L0pUzZPcW4jWsVLIprLW

- Michele Simon (2006). Appetite for Profit: How the Food Industry Undermines Our Health and How to Fight Back. Anatomy of a Food Corporation: Why We Can't Trust Them (p. 1-19). Note: Although this book was published in 2006, this introductory chapter makes claims and accusations that resonate with an activist's ideology and outrage. Consequently, it heats up the discussion around food policy:
  https://drive.google.com/open?id=1ltgIitlGgY1xWq4i8AkquDFI0S6bBL

- Burgan, M. and Winne, M. (2012). Doing Food Policy Councils Right: A Guide to Development and Action (p. 1-66).  Note: Skim this publication for the history, roles and goals of food policy councils, which are primary drivers of food policy at the state level:
  https://drive.google.com/open?id=1VwZHZAFyQ9hByD8qGrt96OXYvTN_p1U-J

Supplementary Materials

**Week 3: Crop and Food Animal Production**

This week focuses on the foundational topic of food production, including the long history of agriculture, the transition to industrial food production, and the merits of alternative agriculture approaches.

**Assignment**

Please visit the Discussions tab in Canvas:
- Discussion Leader Article, due 11:59 p.m. EST on 1/31.
- Discussion Responses, due 11:59 p.m. EST on 2/3.

**Learning Objectives**

- Provide a historical context to the modern food system by describing the rise of agriculture and the associated trends in food production and population.
- Describe the shift from traditional farming and animal production to industrial practices.
- Examine the factors that drove the industrialization of food production and the resulting environmental and social tradeoffs.
- Describe alternative farming practices that seek to establish a sustainable food system, including organic food production, agroecology, and local farming.
- Review the debates regarding the advantages and challenges of organic and local food.

**Lectures**
- Agriculture and the Dawn of Civilization - Guillemin (4:01)
- Cycles of Boom and Bust - Guillemin (9:08)
- Industrialization of the Food System - Guillemin (8:35)
- Alternative Farming: Agroecology and Organic Farming - Guillemin (11:29)
- Alternative Farming: Local and Regional Markets - Guillemin (6:32)

**Required Reading and Viewing**
- *Introduction to the U.S. Food System*, Chapter 11: Crop Production and Food Systems
- *Introduction to the U.S. Food System*, Chapter 12: Food Animal Production
- Video: Crash Course: The Agricultural Revolution (11:10): [https://www.youtube.com/watch?v=Yocja_N5sI1](https://www.youtube.com/watch?v=Yocja_N5sI1)
- "Food Politics: What Everyone Needs to Know" by Robert Paarlberg. Chapter 12: Organic and Local Food (p.139-153): [https://drive.google.com/open?id=0Bxo8dOyj6d9rVUZKaVp5VzVwLUFuZFk4ZXdiTzhreHZuWDRj](https://drive.google.com/open?id=0Bxo8dOyj6d9rVUZKaVp5VzVwLUFuZFk4ZXdiTzhreHZuWDRj)

**Supplementary Material**

**Week 4: Environmental and Public Health Effects of Predominant Diet and Production System**
This week, we will examine the health and environmental effects of the average American diet and the production systems that make it accessible and affordable.

**Assignment**
Quiz #1: Please visit the Quizzes tab in Canvas and complete Quiz #1 by 11:59 EST on 2/10.

**Learning Objectives**
• Describe food intakes and eating patterns in the United States and major trends in the intake since the 1970s.
• Describe the major diet-related conditions and their health and economic impacts.
• Understand why food production capacity depends on ecological integrity.
• Describe how food systems have impacted the status of land, oceans, freshwater, genetic diversity, energy resources and ecosystem services.
• Describe some of the occupational and environmental health risks associated with food and agricultural industries.

Lectures
• What We Eat in America - Valpiani (11:10)
• Public Health Burden of Diet-Related Disease - Valpiani (9:49)
• Human Health Impacts of Industrial Agriculture - Valpiani (15:33)
• Environmental Impacts of Industrial Agriculture - Valpiani (10:52)
• Measuring Environmental Impact: Life-cycle assessment - Valpiani (7:26)

Required Reading and Viewing
• Introduction to the U.S. Food System, Chapter 2: Food System Public Health Effects
  ○ Chapter 1: Key Elements of Healthy Eating Patterns (Skim)
  ○ Chapter 2: Shifts Needed to Align With Healthy Eating Patterns
  ○ Skim Methods; Focus on Results and Discussion sections.
  ○ Skim Section 1, Reads Sections 2 & 3.
Supplementary Material


Week 5: Food Environment, Food Access, and Nutrition in the U.S.

This week, we explore associations between the food environment and the dietary intake of Americans. We will consider components of the food environment such as marketing and the built environment (i.e. store or restaurant access). We will also identify barriers to food access and their consequences.

Assignment

Discussion Leader Article, due 11:59 p.m. EST on 2/14.
Discussion Responses, due 11:59 p.m. EST on 2/17.

Learning Objectives

- Use the social ecological model as a framework for understanding drivers of health behaviors and for planning food system interventions that promote health.
- Describe factors that drive food choice at each level of the social-ecological model.
- Understand associations between food marketing and Americans’ dietary habits.
- Define food insecurity, identify programs aimed at addressing it.
- Explain associations between food access and diet-related disease.
- Provide examples of policies and programs that aim to improve food access.

Lectures

- The Food Environment - Valpiani (6:22)
- Food Retail Store Access - Valpiani (19:42)
- Food Insecurity in the United States - Valpiani (13:29)
- Healthy Food Access Strategies - Obadia (35:14)

Required Reading and Viewing

- *Introduction to the U.S. Food System*, Chapter 17: Healthy Food Environments
  - Read Pages Pages 2-12
The Middle of the Food System

Week 6: Food Distribution and Transport
For this week, we study the distribution and transportation of food by exploring the history of freight transportation and food refrigeration. We also discuss the link between transportation and the emission of greenhouse gases and ozone depleting substances. Finally, we touch upon programs designed to improve the environmental performance of freight transportation.

Assignment:
Quiz #2, due at 11:59 p.m. EST on 2/24.

Learning Objectives
- Provide a historical context to the modern food transportation and refrigeration systems.
- Describe the business categories that create, transform, and deliver food to consumers, including the prime food distribution channels.
• Explain the strengths, limitations, and misconceptions related to food distribution at the local, regional, national and international scale.
• Review the environmental impact of food transport, including climate change and ozone depletion.
• Describe leading programs and initiatives designed to address the environmental impacts of distribution, transportation and refrigeration.

**Lectures**

• Food and Transportation - Guillemin (12:08)
• Why food is transported - Guillemin (7:36)
• Food Distribution Channels - Guillemin (12:55)
• Local and Regional Food Distribution - Guillemin (10:46)
• EPA SmartWay Program - Guillemin (12:07)
• History of Refrigeration and Food (1800s) - Guillemin (5:42)
• History of Refrigeration and Food (1900s) - Guillemin (6:09)
• Refrigeration and Environmental Impacts - Guillemin (11:06)

**Required Reading and Viewing**

**Transportation**

• *Introduction to the U.S. Food System*, Chapter 14: Food Distribution
  https://drive.google.com/open?id=0Bxo8dOyj6d9rNVYydzNnX0hKZ290OFj5bHVDN29UQjluSGxr
• The State of Sustainable Supply Chains: Building Responsible and Resilient Supply Chains by Ernst and Young and United Nations Global Compact (6017). Read the Executive Summary (p. 4-9) and the Maturity Matrix (p. 31)  
• Video: U.S. Railroad History Map 1830 - 1990s (2:40):  
  https://www.youtube.com/watch?v=a8lx5A2q-Eo
• Video: History of Food Distribution (3:26):  
  https://www.youtube.com/watch?v=Qxw8AHlkGAY
• Video: Roadtrip Follows Strawberries Across America, National Geographics (1:48):  
Future of Logistics: Five Technologies That Will Self-Orchestrate The Supply Chain, Forbes:

Refrigeration
- Video: The Story of Frozen Food (2:40):
  https://www.youtube.com/watch?v=uWZwncX_4hk
- Video: How Chlorofluorocarbons Destroy Ozone (2:10):
  https://www.youtube.com/watch?v=IniJx-vRHG0

Distribution Center
- Video: The Warehouse of the Future – WITRON’s Order Picking Machinery (OPM) Technology at the Meijer Distribution Center in Wisconsin (4:42). Note: This promotional video does a good job of showcasing OPM technology, a future trend for large food retailers: https://youtu.be/bn5jjVKhFUs

Supplementary Materials
- The U.S. Environmental Protection Agency’s GreenChill Program:
  https://www.epa.gov/greenchill/about-greenchill
- The U.S. Environmental Protection Agency SmartWay Program:
  https://www.epa.gov/smartway
- Schwartz, H. G., Ch. 5: Transportation. Climate Change Impacts in the United States: The Third National Climate Assessment, U.S. Global Change Research Program, 130-149. doi:10.7930/J06Q1V53:

Week 7: Food Processing and Packaging
For this week, we discuss the topics of food processing and packaging, two related activities that generate significant environmental impacts. The class will provide a historical context to processed foods, review technical considerations, and address pertinent environmental concerns and solutions.

Assignment
Discussion Leader Article, due 11:59 p.m. EST on 2/28.
Discussion Responses, due 11:59 p.m. EST on 3/3.
Learning Objectives

- Understand why foods are processed and how processing can change foods in positive and negative ways.
- Identify the four major methods of processing foods and their benefits and drawbacks.
- Understand the functions of food packages, materials used, and how packaging impacts the environment.
- Apply a historical, economic, and environmental critique to a discussion about food processing and packaging.

Lectures

- The History of Food Processing and Packaging - Guillemin (10:15)
- Why Foods are Processed - Guillemin (5:00)
- Food Processing Methods - Guillemin (6:30)
- Food Packaging Materials and Methods - Guillemin (7:04)
- Packaging Waste Management Strategies - Guillemin (14:47)
- Food Processing and Environmental Impacts - Guillemin (10:05)
- Environmental Strategies for Food Processing - Guillemin (11:59)

Required Readings and Viewings

- *Introduction to the U.S. Food System*: Chapter 13: Food Processing and Packaging.

Food Processing

- Evelyn Kim, Processed Food: A 2-Million-Year History, Scientific America, September 1, 2013 (p. 1-11). Note: This somewhat whimsical list of foods offers a marvelous view of the long history of human gastronomical inventiveness.
  https://drive.google.com/open?id=0Bxo8dOyj6d9reXZVcXVTR1owNlk
- Melanie Warner (2014). Pandora’s Lunchbox: How Processed Food Took Over the American Meal. Why Bread Needs Strange Ingredients (p. 99-104): Note: If you ever wondered why food additives are so popular in processed foods, this story of breadmaking provides insight into the question..
  https://drive.google.com/open?id=1GBqUfk_ZdGsHTZWQfU-9RC9xFf3_zOh9
- Eric Schlosser (2012). Fast Food Nation: The Dark Side of the All-American Meal. Excerpt: "million and millions of fries" (p. 129-131). Note: This reading recounts how even the relatively simple task of making french fries can become a high-tech enterprise.
  https://drive.google.com/open?id=1_ZSTjcMEGXxCxqH70_oE0GkdRrtFBfJE
Pollution Prevention and Energy Efficiency

- Environmental Self-Assessment for the Food Processing Industry: A Quick and Easy Checklist of Pollution Prevention Measures for the Food Processing Industry (March 2001). Note: Skim pages 1-13 to see the types of questions used to evaluate pollution prevention opportunities at food processing facilities: https://drive.google.com/open?id=0Bxo8dOyj6d9rNGVSBExqM2NsTHc

Food Packaging

- “Could Milk Be the Future of Food Packaging?” By Jillian Frankel, TakePart.com, August 25, 2016. (about 2-pages long including photos): Note: Particularly in the area of packaging, environmentalists hope for a technological breakthroughs that can outmatch the high utility and low cost of plastics. This article provides a possible solution: http://www.takepart.com/article/2016/08/25/milk-food-package/

Alternative Food Processing Formats


Supplementary Materials

- Food Manufacturing Industry: Profile on Pollution Prevention and Other Sustainable Development Strategies, Abt Associates (prepared for the Toxic Release Inventory Program Division, Office of Chemical Safety and Pollution Prevention, U.S. EPA), August 1, 2016:


- ENERGY STAR Focus on Energy Efficiency in Food Processing

- ENERGY STAR Focus on Energy Efficiency in Food Processing. Note: This webpage shows how the EPA Energy Star program seeks to improve energy efficiency by providing energy performance indicators for food processing companies.

**Week 8: Regional Food Hubs and Food Security**

In Week 8, we explore the potential of food hubs to act as bridges from small-scale, localized producers to the large-scale, traditional grocery retail sector. We'll define food hubs, look into the services they provide, and discuss their limitations and challenges.

**Assignment:**

Quiz #3, due at 11:59 p.m. EST on 3/10.

**Learning Objectives**

- Define local and regional in the context of food systems.
- Define the terms *food hub* and *community food security*; explain food hub functions.
- Explain the challenges faced by small- and mid-sized farmers in accessing markets.
- Identify strengths and weaknesses of the food hub model, as well as enabling policies or regulations.

**Lectures**

- Regional Food Systems and Food Hubs: Definitions - Valpiani
- Food Hub Services - Valpiani
- Impacts of Food Hubs - Valpiani
- Constraints on and Limitations of Food Hubs - Valpiani
- Policies and Programs in Support of Food Hubs - Valpiani
- Case Study: Fair Acre Traders - Nyquist

**Required Readings and Viewings**
● *Introduction to the U.S. Food System*, Chapter 6: Community Food Security

● Video (2 min): Red Tomato Intro: Local Food in Every Shopping Cart. Available at: [https://youtu.be/MKsYoxyclUg](https://youtu.be/MKsYoxyclUg)

  ○ Read Executive Summary (pgs. 4-9).

  ○ Read pages 1 - 29; Skim rest of document according to interest


● National Good Food Network Food Hub Center:
  ○ Explore this valuable resource center according to your interest. Of note, the site offers a series of interesting Webinars on topics such as food hub financing, harnessing local infrastructure for food hub success, and case studies of successful food hubs.
  ○ [http://www.ngfn.org/resources/food-hubs](http://www.ngfn.org/resources/food-hubs)

**Supplementary Materials**


**Week 9: Supermarkets**

In week 9, we explore food retail stores, including their history, business practices, store formats, and operational efficiency methods. We will also review sustainable sourcing strategies, including third-party product certification programs and the danger of greenwashing.

**Assignment**
Discussion Leader Article, due 11:59 p.m. EST on 3/14.
Discussion Responses, due 11:59 p.m. EST on 3/17.

Learning Objectives

- Recount the history of food retailers in the US from the early 19th century to the present.
- Explain the economics of the food retail sector and its different store formats.
- Review how to improve store operational efficiency to reduce energy, waste management and refrigerant costs.
- Review alternative food retail formats, including food co-ops and zero-waste stores.
- Explore sustainable sourcing approaches and third-party certification programs that allow retailers to feature sustainable and ethical products.

Lectures

- History of U.S. Food Retail (1890s to 1940s) - Guillemin
- History of U.S. Food Retail (1950s to Present) - Guillemin
- Food Retail Business - Guillemin (13:18)
- Food Retail Store Formats - Guillemin (12:59)
- Supermarket Operational Efficiency Strategies - Guillemin

Required Readings and Viewings

Business Efficiency

- *Sustainability Quick Start Guide*, Food Marketing Institute (p. 1-14). Note: Skim this document to see a range of sustainable activities for grocery stores. [https://docs.google.com/document/d/1aZckHKlyLNetSTKZrGiH3wNEzUcP3LFb93RrsA5vduA/edit?usp=sharing](https://docs.google.com/document/d/1aZckHKlyLNetSTKZrGiH3wNEzUcP3LFb93RrsA5vduA/edit?usp=sharing)
Product Claims and Labels

- ISSA Video “Seven Sins of Greenwashing” by Scot Case, January 31, 2012 (3:37). Note: While this presentation does not focus specifically on food, its greenwashing concepts apply to food marketing labels and claims. [https://youtu.be/9jJ6YH2H1xU](https://youtu.be/9jJ6YH2H1xU)

- Video: Canadian Broadcasting Corporation (Feb. 13, 2017). Healthy or junk food? (22:25). Note: This investigative report evaluates nutritional claims for food products: [https://www.youtube.com/watch?v=kUKOt_SvTQc](https://www.youtube.com/watch?v=kUKOt_SvTQc)

- *Sustainable Sourcing Guide for High Impact Commodities*, Food Marketing Institute, 2010 (p. 1-11). Note: This guide lists concerns and certification labels for seven high impact commodities, sugarcane, cocoa, paper/pulp, coffee, soy, palm oil and beef: [https://drive.google.com/open?id=0Bxo8dOyj6d9rNGl4aUpOUTdMMGs](https://drive.google.com/open?id=0Bxo8dOyj6d9rNGl4aUpOUTdMMGs)

- EcoLabel Index: This online resource is the largest global directory of ecolabels, tracking 465 ecolabels in 25 industry sectors: [http://www.ecolabelindex.com/](http://www.ecolabelindex.com/)

Alternative Store Formats


- Janelle Nanos (MAY 13, 2016), Boston Globe. *Daily Table is on a mission to stop food waste and feed the hungry.* Note: This story is about a nonprofit store that transforms donated food into healthy, affordable meals. [https://docs.google.com/document/d/1e-R3WlOhO8uZBHbLCfGbPJjs5DBZWNyn82sg1iX6bCU/edit?usp=sharing](https://docs.google.com/document/d/1e-R3WlOhO8uZBHbLCfGbPJjs5DBZWNyn82sg1iX6bCU/edit?usp=sharing)

Supplementary Materials


- *Sustainability on the Shelves: A Guide for Category Managers*, Food Marketing Institute, September 30, 2010, (p. 1-37). Note: This document provides a life-cycle perspective to evaluate the environmental impact of products: [https://drive.google.com/open?id=0Bxo8dOyj6d9rQnk3eWJWOWFETDQ](https://drive.google.com/open?id=0Bxo8dOyj6d9rQnk3eWJWOWFETDQ)
Week 10: Direct to Consumer

In Week 10, we consider the potential of direct producer-to-consumer food sales to benefit farmer incomes, consumer health, and the environment.

Assignment:
Quiz #4, due at 11:59 p.m. EST on 3/24.

Learning Objectives
● Review trends in U.S. local and regional direct-to-consumer sales.
● Explore the effect of direct-to-consumer sales on the sustainability of food production.
● Assess the economic impact of direct sales to farmer income and local economies.
● Consider evidence for the effect of direct-to-consumer sales on Americans’ health.
● Discuss whether or not “local food” should be scaled up; identify barriers to doing so.

Lectures
● Direct-to-Consumer Sales: An Overview - Valpiani
  ○ Prevalence, formats, customer motivations, policies
● Economic and Environmental Impacts of Direct-to-Consumer Sales - Valpiani
● Health Impacts of Direct-to-Consumer Food Sales - Valpiani
● Scaling up: Barriers and Potential - Valpiani

Required Readings and Viewings


○ Skim, for an understanding of the limitations of the “food miles” paradigm.

Supplementary Materials


Week 11: Restaurants

In week 11, we discuss food service providers, beginning with the historical and contemporary development of the “restaurant” format and overarching economic trends. Then we focus on sustainable business practices and programs, and underlying social justice concerns.

Assignment

None (Spring Break)

Learning Objectives

- Explain the history of food service providers, from 19th century Parisian “restaurants” to the advent of fast food in America.
- Review the various restaurant formats and their target audiences.
- Describe the economic and demographic trends that have led to the increased popularity of out-of-home dining experiences.
- Highlight the corporate social responsibility (CSR) initiatives and “green” restaurant trends.
- Explore the topic of worker rights and the connection between food justice and the Slow Food Movement.

Lectures

- History of Restaurants - Guillemin (16:16)
• Advent of the McDonald’s Business Model. Six excerpts from the feature film “The Founder” - Guillemin
• Restaurants Formats - Guillemin (5:45)
• Food Service Economics - Guillemins (10:19)
• Sustainable Operations for Restaurants - Guillemins (7:47)

Required Readings and Viewings

Business Efficiency
• Josh Prigge (December 15, 2017). “Time to Fire Up Restaurant Sustainability – Here’s How,” Environmental Leader (p. 1-6). Note: This article presents sustainability strategies for restaurants, including the underlying managerial practices that form a strong program.  https://docs.google.com/document/d/1tbPkXdHXBkWKraPpO22EkzQdEoHJXPEM2pt r5bt2Uk/edit?usp=sharing
• National Restaurant Association (2013). Shedding Light on Sustainability (p. 1-15). Note: Read pages 3-5 of this document to see how the largest restaurant trade association promotes sustainability. Skim the following pages, which focus on specific efficiency programs.  https://conserve.restaurant.org/Downloads/2013_Sustainability_Report_Final.aspx

Innovative Restaurant Formats
• Tanya Timmers (March 22, 2016). “7 cool ways restaurants are going sustainable” (p. 1-4). Note: This article summarizes several trends.  https://docs.google.com/document/d/1snDB0l3JcIweIQ7_kg5L883c7A4DPBskSV7Hc4Z XSo8/edit?usp=sharing

Worker Rights
• Saru Jayaraman (2013). Behind the Kitchen Door. Chapter 2: Real Sustainability, Please! (p. 19-32). Note: This chapter explores the issue of workplace fairness and equity among restaurant workers, including staff at high end establishments featuring organic, local, and “slow food” menus.  https://drive.google.com/open?id=1t21mACdZu_pDVk4x3qov-fNTYIE_MIXd
Supplementary materials

- The National Restaurant Association’s Conserve Program. Note: Puruse this website to see the latest from the NRA’s sustainability program “ConServe.”
- The Sustainable Restaurant Association (RSA). Note: View this site to learn about Europe’s leading sustainability certification program. http://www.thesra.org/
- The Green Restaurant Association. Note: View this site to learn about the most established sustainability certification program for restaurants in the U.S.
  http://www.dinegreen.com/

Week 12: Institutional Food Service Providers

In week 12, we examine institutional food service providers and the food management service companies that run institutional food operations, with focus on sustainable opportunities pursued corporations and communities.

Assignment

Discussion Leader Article, due 11:59 p.m. EST on 4/4.
Discussion Responses, due 11:59 p.m. EST on 4/7.

Learning Objectives

- Review the types of institutional food service providers.
- Discuss the role of food service management companies.
- Explain the challenges and opportunities for institutions to purchase more sustainable products.
- Provide examples of initiatives that improve food sustainability and social justice at institutions.
- Showcase the Corporate Social Responsibility (CSR) efforts of a major food management company.

Lectures

- Farm to institution overview - Jen Obadia, guest lecturer (20 minutes)
- Food service management companies - Jen Obadia, guest lecturer (29 minutes)

Required Readings and Viewings

Overview

- Madeleine Pullman and Wu Zhaohui (2012). Food Supply Chain Management: Economic, Social and Environmental Perspectives; Chapter 7: Food Service (p.
Note: Concentrate on institutional food operations and food management companies (p. 165-178):
https://drive.google.com/open?id=1okEgyD24pP3dZhVuBOyup8pmV0xXcfJC

**Institutions**

- Benefits of a Farm to School Program (p. 1-2). https://drive.google.com/file/d/1MrLeOjmRr3-p5khLz2ZdsWpQ3NGvt2Mg/view?usp=sharing
- Tanya Denckla Cobb (2011). *Reclaiming Our Food System: How the Grassroots Food Movement Is Changing the Way We Eat*
  - Making Sustainability a Campus Issue (p. 161-164). https://drive.google.com/open?id=1Ex8PrBAJBbBUQAbkPtHwWjMO5o5ujYq
  - Nourishing Kids by Connecting Farms and Schools (p. 146-149): https://drive.google.com/open?id=1zH5o-UV5PIx1RKqGTciIV_{Ww4ykKRdoz

**Food Management Companies**


**Supplementary Materials**

- Look up statistics for farm to school in your own state at: https://farmtoschoolcensus.fns.usda.gov/
Week 13: Wasted Food

In Week 13, we explore the topic of wasted food, an issue that has gain national and international attention at every facet of the food system. The class will explore how to define and measure it, why it matters, and strategies to address the problem.

Assignment:
Quiz #5, due at 11:59 p.m. EST on 4/14.

Learning Objectives

- Review how to define and measure wasted food.
- Explain the main sources of “leakage” or waste in the food system.
- Describe the environmental and social impacts of wasted food.
- Provide examples of technologies, programs and policies designed to prevent and divert waste food from landfills.

Lectures

- Food loss — Jen Obadia, guest lecturer (24 minutes)
- Quantifying food waste — Megan Lenherd, guest lecturer (17 minutes)

Required Readings and Viewing

Food Waste Challenges

  https://drive.google.com/open?id=1rMm3EApSWEc1vzL0urlV2UG-9zq5hrEM
  https://drive.google.com/open?id=1zOtkW8zgFz14xN7_g6XdCHRqgfyc7GVB
- Video: John Oliver (2015). Food Waste, Last Week Tonight with John Oliver (HBO) (17:49). Note: This comedy report does a surprising good job of summarizing the problem of wasted food, including its sources and impacts:
  https://youtu.be/i8xwLWb0ILY

Food Waste Solutions

- ReFed: A data-driven guide for businesses, government, funders, and nonprofits to collectively reduce food waste at scale. Visit the website www.refed.com and watch the video to learn about the latest food waste reduction efforts, as outline in the “Roadmap.”
Video: The Roadmap to Reduce U.S. Food Waste by 20% (2:57).
https://youtu.be/z1X-HWPbeD4

https://youtu.be/rICr3kCXF6E

https://youtu.be/qQQMygvn0g


Supplementary Materials

● Recycling Works: Options for Complying with the Commercial Organics Waste Ban:
http://www.recyclingworksma.com/commercial-organics-waste-ban/

● RecycleWorks Case Studies on supermarkets (text and two videos):
http://www.recyclingworksma.com/how-to/business-sector-guidance/supermarkets/

● EPA’s Food Recovery Challenge:
https://www.epa.gov/sustainable-management-food/food-recovery-challenge-frc

Week 14: Final Paper

In Week 14, students will complete and submit their Final Paper, which focuses on a product, technology, program or company dedicated to promoting a healthy, sustainable, and/or ethical food system.

Learning Objective:

● Explore the opportunities and limits of an initiative or technology that promises to promote a sustainable, healthy, and/or just food system.

● Integrate themes and concepts from the course into a final paper.

● Critique a topic based on the insights and perspectives gleaned from the course.

Assignments

● Final paper due Sunday 4/21 at 11:59 p.m. EST.

This syllabus is subject to modification at the discretion of the instructors.