

**Instructor:** Dr. Edward (Ted) Jaenicke, [tjaenicke@psu.edu](mailto:tjaenicke@psu.edu)

**Office Hours:** In person (Room 208B Armsby) or Zoom (<https://psu.zoom.us/j/5075751844>).

Tuesdays 4:30 to 5:30pm and Wednesdays 4:00 to 5:00pm, and by appointment

**Learning Objectives:** Throughout the semester, students will...

- ❑ Understand the U.S. food system as a complex interaction of natural and human-based systems. This understanding will require examining the agronomic, environmental, economic, sociological, and cultural reasons that lead to the current state of the food system.
- ❑ Apply critical thinking and analytic tools to investigating food-system outcomes.
- ❑ Formulate answers to questions about where, how, and why food products are grown the way they are.
- ❑ Discuss and begin to explore alternative food-system scenarios and the policies that might lead to these scenarios.

**Course Overview:** Our food system is a product of complex interaction of three systems: the natural ecosystem, the managed agricultural system, and the socio-economic system. Farming, food processing, food distribution, and consumption decisions are all governed by the interaction of these systems. Consequences of these decisions, along with the interactions themselves, have generated a number of overarching scientific and social “hot-button” topics that affect or are affected by the food system:

- ❑ genetically modified organisms (GMOs),
- ❑ organic crops and food,
- ❑ agricultural and food policy,
- ❑ environmental implications from agriculture,
- ❑ farm labor (and other labor issues),
- ❑ the role of agribusinesses,
- ❑ animal welfare rules and regulations,
- ❑ food labeling,
- ❑ diet, health, and nutrition,
- ❑ food waste, and
- ❑ domestic food insecurity and food access.

Students in this course will investigate and discuss all of these topics by reading both popular press accounts and peer-reviewed academic research. However, to provide additional relevance, the course will use *specific foods* or *crops* to provide a more concrete examination of these topics. Individual foods or crops examined will include **tomatoes**, **bananas**, **potatoes**, **lettuce**, **chickens**, **corn**, and **beef**. These foods or crops represent both fresh and processed foods, as well as both domestically and internationally grown foods.

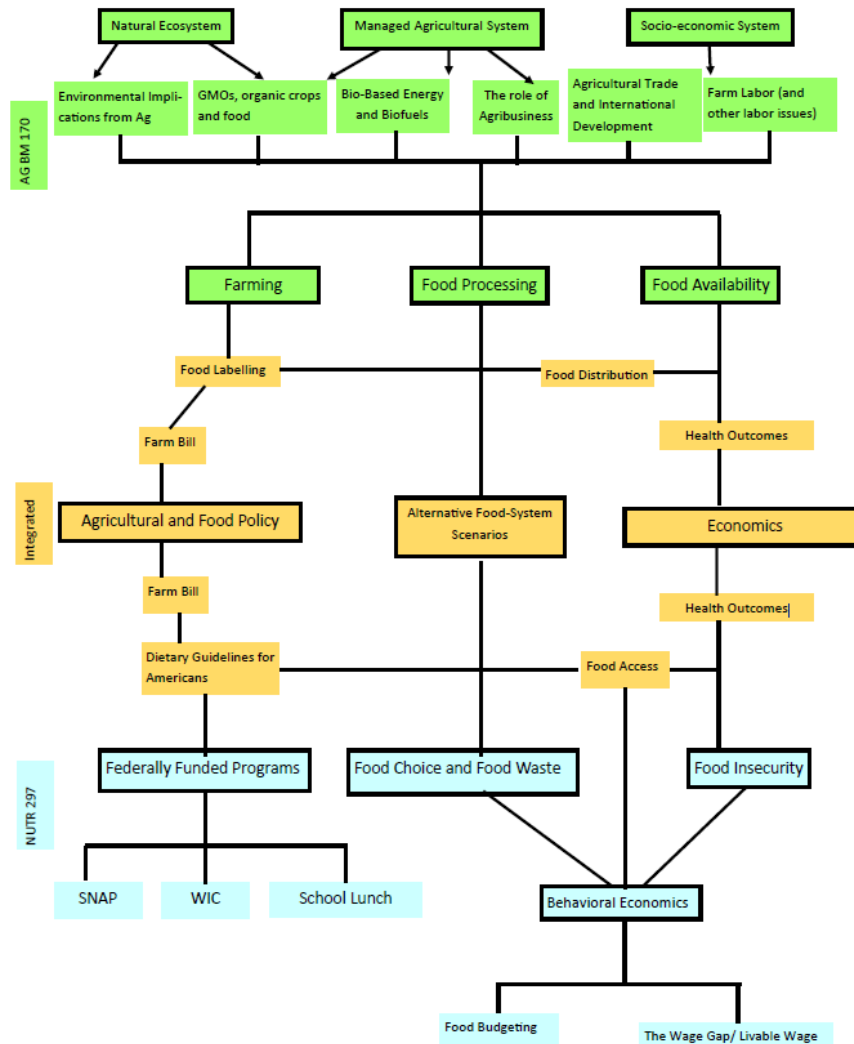
For each of these specific foods, the class will explore and answer **five important questions**:

- (1) Where is the crop grown and why?
- (2) How labor or technology intensive (e.g., chemical, biotech, or equipment intensive) is this crop, and what are the implications to society?

- (3) What policies (e.g., farm subsidies, food assistance, nutrition guidelines, labeling requirements, etc.) affect production, distribution, and/or consumption of this crop?
- (4) How influential are agribusinesses such as food processors and food retailers in the crop's production, distribution, and/or consumption?
- (5) What overall concerns do consumers or public-interest groups have, and are there alternative production systems available that alleviate these concerns? (Examples of alternative systems include organic, sustainable, and local/regional.)

While these questions will be discussed individually for the seven foods and crops mentioned above, a thorough understanding of the food system will require comparing them and discussing them in context of the hot-button issues listed above.

**General Education/Integrated Studies Requirements:** This course is paired with NUTR 175Z (formerly NUTR 297) to fulfill Integrated Studies Gen Ed requirement. The overlap and unique features of each course are highlighted in the table below.



**Required Course Materials:** All readings and videos, will be available via links provided in Canvas. <http://canvas.psu.edu>:

However, three chapters will be from Tracie McMillan’s great 2012 book, *The American Way of Eating: Undercover at Walmart, Applebee’s, Farm Fields and the Dinner Table*, available for about \$12 on Amazon. (Even though it’s over 10 years old, this book is still my favorite food book.)

**Mentimeter.com:** We will be using *Mentimeter* ([www.menti.com](http://www.menti.com)) to help with class discussion and participation. You will be able to submit answers to in-class questions using Apple or Android smartphones and tablets, laptops, or through text messages.

***Class Expectations and Notes:***

1. This class requires attendance and participation (worth 15% of the final grade). Note: Starting Week 2, attendance will be taken visually, by roll call, or by other methods.
2. Discussions, assisted by the Mentimeter web site, will be woven into each class.
3. To make sure students are ready for these discussions, there will be weekly reading assignments, with questions for students to answer, due Monday nights.
4. There will be three online quizzes that cover material presented in class lectures and discussions.
5. Writing/web/blog assignments: **Students will be asked to pick a food or crop not covered in class.** Once the food is identified, students will be asked to submit four Web-based reports that address the five important questions listed above. Each report will answer specific questions about the student’s chosen crop, and the answers should rely on outside references, some of which are provided in the assignment sheet. Tables, figures, and maps are either required or strongly encouraged. Students must provide links to the source material. Finally, each the assignments will be published as a separate page on a student’s class blog using the “Sites at Penn State” platform.
6. There is no final exam.

***Assignments and Gradable Events:***

<b><i>% of Grade</i></b>	<b><i>Assignment/ Gradable Event</i></b>	<b><i>Individual or Team</i></b>	<b><i>Description</i></b>
30	Reading Assignments. (Weekly)	Individual	Students will be assessed weekly to make sure they have read class materials and are prepared for class discussion. These assessments will generally be in the form of weekly assignments due before <b>Tuesday’s</b> class.
15	Attendance and class participation. (Weekly)	Individual	Students will be regularly assessed on attendance and the quality of class participation (with the help of <i>Mentimeter</i> ).
15	In-class quizzes (Three)	Individual	There will be three in-class quizzes covering material presented during class.
40	Crop or food reports, published as blog pages (Four)	Individual	After picking a crop or food (blog report A), students must submit four additional blog reports that address the five questions listed above on pages 1-2. These blog posts/web pages must make use of outside references and links. Specific guidelines will be distributed when the reports are assigned.

**Academic Integrity:** Academic integrity is the pursuit of scholarly activity in an open, honest, and responsible manner. Academic integrity is a basic guiding principle for all academic activity at The Pennsylvania State University, and all members of the University community are expected to act in accordance with this principle.

According to Penn State policy [G-9: Academic Integrity](#), an academic integrity violation is “an intentional, unintentional, or attempted violation of course or assessment policies to gain an academic advantage or to advantage or disadvantage another student academically.” Unless your instructor tells you otherwise, you must complete all course work entirely on your own, using only sources that have been permitted by your instructor, and you may not assist other students with papers, quizzes, exams, or other assessments. If your instructor allows you to use ideas, images, or word phrases created by another person (e.g., from Course Hero or Chegg) or by generative technology, such as ChatGPT, you must identify their source. You may not submit false or fabricated information, use the same academic work for credit in multiple courses, or share instructional content. Students with questions about academic integrity should ask their instructor **before submitting work**.

**Students facing allegations of academic misconduct may not drop/withdraw from the affected course** unless they are cleared of wrongdoing (see [G-9: Academic Integrity](#)). Attempted drops will be prevented or reversed, and students will be expected to complete course work and meet course deadlines. Students who are found responsible for academic integrity violations face academic outcomes, which can be severe, and put themselves at jeopardy for other outcomes which may include ineligibility for Dean’s List, pass/fail elections, and grade forgiveness. Students may also face consequences from their home/major program and/or The Schreyer Honors College.

**Disability Accommodation:** Penn State welcomes students with disabilities into the University’s educational programs. Every Penn State campus has an office for students with disabilities. Student Disability Resources (SDR) website provides [contact information for every Penn State campus](#) (<http://equity.psu.edu/sdr/disability-coordinator>). For further information, please visit [Student Disability Resources website](#) (<http://equity.psu.edu/sdr/>).

To receive consideration for reasonable accommodations, you must contact the appropriate disability services office at the campus where you are officially enrolled, participate in an intake interview, and provide documentation: [See documentation guidelines](#) (<http://equity.psu.edu/sdr/guidelines>). If the documentation supports your request for reasonable accommodations, your campus disability services office will provide you with an accommodation letter. Please share this letter with your instructors and discuss the accommodations with them as early as possible. You must follow this process for every semester that you request accommodations.

**Counseling and Psychological Services Statement:** Many students at Penn State face personal challenges or have psychological needs that may interfere with their academic progress, social development, or emotional wellbeing. The university offers a variety of confidential services to help you through difficult times, including individual and group counseling, crisis intervention, consultations, online chats, and mental health screenings. These services are provided by staff who welcome all students and embrace a philosophy respectful of clients’ cultural and religious backgrounds, and sensitive to differences in race, ability, gender identity and sexual orientation.

[Counseling and Psychological Services at University Park \(CAPS\)](http://studentaffairs.psu.edu/counseling/)  
(<http://studentaffairs.psu.edu/counseling/>): 814-863-0395

Penn State Crisis Line (24 hours/7 days/week): 877-229-6400  
Crisis Text Line (24 hours/7 days/week): Text LIONS to 741741

***Educational Equity/Report Bias:*** Consistent with University Policy AD29, students who believe they have experienced or observed a hate crime, an act of intolerance, discrimination, or harassment that occurs at Penn State are urged to report these incidents as outlined on the University's Report Bias webpage (<http://equity.psu.edu/reportbias/>).

**AG BM 170Z, Course Schedule Spring Semester 2023 (subject to change)**

<b>Week (Dates)</b>	<b>Topics/Gradable Events</b>	<b>Readings/Notes (Note: these may change)</b>
1. Jan. 9, 11	Introduction: What is the "Food System"? Food trends in the U.S. foods system.	<ul style="list-style-type: none"> <li>❑ McMillan, 2012, "Introduction - Eating in America," pages 1-13.</li> <li>❑ Klein and Locke, <i>Vox</i>, 20, "40 maps that explain food in America."</li> </ul>
2. Jan. 16, 18	Introductions to 12 overarching topics affecting or affected by the food system	<ul style="list-style-type: none"> <li>❑ (Labor) McMillan, "Peaches," pages 37-55.</li> <li>❑ Jarvis, <i>NY Times</i>, 2020, "The Scramble to Pluck 24 Billion Cherries in Eight Weeks "</li> </ul>
3. Jan. 23, 25	Tomatoes I (both fresh and processed) (i) Where are they grown (commercially), and why? (ii) How intensively are they grown? (E.g., Chemical, GMO, Labor, Land) (iii) What policies affect production and/or consumption?	Alexander. <i>Ten Tomatoes That Changed the World</i> , 2022. <ul style="list-style-type: none"> <li>❑ Ch 8 - "Who Killed the Tomato?"</li> <li>❑ Ch 9 - "Attack of the Heirloom Tomatoes"</li> </ul>
4. Jan. 30, Feb. 1	Tomatoes II (both fresh and processed) (iv) What role to agribusinesses such as food processors and food retailers play? (v) What overall concerns do consumers or public-interest groups have, and are there alternative production systems available that alleviate these concerns?	<ul style="list-style-type: none"> <li>❑ Alexander's, <i>Ten Tomatoes...</i> Ch. 10 - "Winter is Coming"</li> <li>❑ McMillan's, <i>American Way of Eating</i>, "Produce 101," pp. 129-160</li> </ul>
5. Feb. 6, 8	Bananas (fresh) - same questions as Weeks 3 and 4 <b>Quiz 1 (Tuesday Feb. 6)</b> <b>Assignment A (Due Thurs. Feb. 8)</b>	<ul style="list-style-type: none"> <li>❑ CNBC's 2019 video, <i>Why the Banana Business Of Chiquita And Dole Is At Risk</i>,"</li> <li>❑ SciShow's "Keeping Bananas Apeelin'," 2015.</li> <li>❑ Jose Daniel Lopez's "Short Documentary - The Real Price of Bananas," 2014</li> </ul>
6. Feb. 13, 15	Potatoes and French Fries (both fresh and processed)	<ul style="list-style-type: none"> <li>❑ Eric Schlosser's <i>Fast Food Nation</i> (2001), an excerpt.</li> <li>❑ Marc Gunther's 2013 article in the <i>Guardian</i>, "McDonald's GMO dilemma: why fries are causing such a fuss."</li> </ul>
7. Feb. 20, 22	Lettuce	<ul style="list-style-type: none"> <li>❑ Samuel Fromartz's "A Spring Mix," from <i>Organic, Inc.</i>, 2006.</li> </ul>
8. Feb. 27, 29	Farm Subsidies; SNAP <b>Assignment B (Due Wednesday Feb. 28)</b>	<ul style="list-style-type: none"> <li>❑ The Illogic of Farm Subsidies, and Other Agricultural Truths, <i>NYTimes</i>, by Stephen J. Dubner</li> <li>❑ The Mad Cheese Scientists Fighting to Save the Dairy Industry, <i>Bloomberg Businessweek</i>, July 19, 2017, by Clint Rainey.</li> <li>❑ The SNAP Challenge: Watch a PBS News Hour reporter shop for the SNAP Challenge</li> </ul>
March 4 - 8	<i>Spring Break! No classes.</i>	
9. March 12, 14	Chickens I (processed)	<ul style="list-style-type: none"> <li>❑ "The Business of Broilers," 2013, by The Pew Charitable Trusts.</li> <li>❑ CNBC's 2018 video, "Why Is Costco Opening Its Own Chicken Farm?"</li> </ul>
10. March 19, 21	Chicken II (processed)	<ul style="list-style-type: none"> <li>❑ Jacob Koffler, <i>Time</i>, "Why We Need Happier Chickens," 2015.</li> </ul>

11. March 26, 28	Food Access and Food Deserts <b>Quiz 2 (Tuesday March 26)</b>	<ul style="list-style-type: none"> <li>❑ Chicago Booth Review’s February 2019 video, “The hole in the food-desert hypothesis”</li> <li>❑ Sarah Kliff’s June 8, 2012, Washington Post article</li> <li>❑ Why do poor Americans eat so unhealthfully? <i>Los Angeles Times</i>, Feb. 7, 2018, by Priya Fielding-Singh.</li> </ul>
12. April 2, 4	Corn and Corn-based Products (both fresh and processed) <b>Assignment C (Due Thursday April 4)</b>	<ul style="list-style-type: none"> <li>❑ Discovery’s 2013 “How Stuff Works” series’ episode on corn, found here: <a href="https://www.youtube.com/watch?v=LGJ6D3KNJ9E">https://www.youtube.com/watch?v=LGJ6D3KNJ9E</a></li> </ul>
13. April 9, 11	Beef (processed)	<ul style="list-style-type: none"> <li>❑ Michael Pollan’s March 31, 2002, <i>New York Times Magazine</i> story, “Power Steer,”</li> </ul>
14. April 16, 18	Food Waste and Food Labels	<ul style="list-style-type: none"> <li>❑ Video - PBS News Hour, “Why does almost half of America’s food go to waste?” June 2015.</li> <li>❑ Video - CBC Market Place, “Food waste: How much food do supermarkets throw away?”</li> </ul>
15. April 23, 25	Ag, the Environment, and Feeding the World. <b>Quiz 3 (Thursday, April 25).</b> <b>Assignment D (Due Monday April 29)</b>	<ul style="list-style-type: none"> <li>❑ Ranganathan, Waite, Searchinger, and Hanson. “How to Sustainably Feed 10 Billion People by 2050, in 21 Charts”. World Resources Institute. December 05, 2018</li> </ul>
<i>No Final</i>		