Feeding the Planet: Nutrition, Sustainability, and the Economics of Eating

UF Quest 2 IDS2935 Class Number 23203

General Education: Social and Behavioral Sciences, International

[Note: A minimum grade of C is required for General Education credit]

Spring 2021, Tuesdays, Periods 4-5 (10:40-12:35pm) and Thursday, Period 4 (10:40-11:30am) Location:

MAT 0004, in person section; Zoom, online section

Class resources, announcements, updates, and assignments will be made available through the Canvas

site for this course

Instructors (this is a team-taught course):

Lead Instructor: Jeanette Andrade, Assistant Professor (Food Science and Human Nutrition)

jandrade1@ufl.edu 352-294-3975

Office Hours: Mondays and Wednesdays 12:00-1:00pm or by appointment, 467B Food Science and

Human Nutrition Building

Laura Acosta, Lecturer in Dietetics (Food Science and Human Nutrition)

ljacosta@ufl.edu 352-273-3472

Office Hours: Fridays 11:00am-1:00pm or by appointment, Building 120, room 104D

Derek Farnsworth, Assistant Professor (Food and Resource Economics)

dfarnswo@ufl.edu 352-294-7698

Office Hours: Tuesdays and Thursdays 10:00-11:00am, 1109 McCarty Hall B

Course Description:

This Quest 2 course explores the challenges of eating well around the globe considering environmental and economic factors, as well as access to and availability of nutritious food. Relying on the disciplines of food and resource economics, food science, and human nutrition, the course investigates and reflects on the contemporary international issues of global nutrition and sustainability from both economic and health perspectives. Major themes include the economics of global food systems, the growing problem of food waste, the implications of population growth, the impact of various eating patterns (e.g., animal sourced proteins, vegan, vegetarian, etc.) on the environment, the issues of food security and sustainability, and the elusive meaning of "healthy" eating. These themes are represented on an international level, with local and regional examples presented for classroom discussions and activities. Through field trips to local facilities (Alan and Cathy Hitchcock Pantry, UF Field and Fork Farm and Gardens, Alachua County Schools Food Hub, and campus dining halls), plate waste analysis, and classroom discussion and debates, students will grapple with the essential question of whether it is possible to feed a growing global population in a healthful, economically-feasible, and environmentally responsible way. The course will culminate with a group project in which students synthesize potential sustainable solutions for various regions of the world, considering both environmental and nutritional perspectives. 3 credits.

Course Delivery:

This will be team-taught with instructors from Food Science and Human Nutrition and Food and Resource Economics. One lead instructor (Dr. Jeanette Andrade) will have the primary responsibility for

coordinating course activities and will be present at a majority (85%) of class meetings (even when not listed as the discussion leader). Other instructors will rotate in to teach the topics and units that best align with their individual areas of expertise. All instructors will collaborate in grading assignments, and will be available to meet with students during office hours.

The course will be delivered in a flipped classroom style where students are expected to complete assigned readings prior to class and be ready for active exploration and discussion to deepen their understanding. The role of the instructors will be to facilitate discussion, add insights from their expertise, moderate classroom activities and debates, and ask probing questions to stimulate students' creative and critical thinking skills.

Some class periods will consist of discussions that underscore major course themes; others will involve group activities or debates that challenge students to synthesize and apply what they've learned. Midsemester, students will participate in a series of field trips to experience, on a local level, the global-scale concepts that the course addresses. Each field trip will be followed with an assigned Reflection Paper that will challenge students to align their observations to the context of the course's thematic motifs. At the conclusion of the semester, the course will culminate with a capstone group project and presentation, where students will propose potential sustainable solutions for food systems in different areas of the world, considering the economic, environmental, and nutritional implications of their proposals.

Quest 2 / Gen Ed Descriptions and Student Learning Outcomes:

<u>Quest 2 Description</u>: Grounded in the modes of inquiry and analysis characteristic of the social and/or biophysical sciences, Quest 2 courses invite students to address pressing questions facing human society and the planet—questions that outstrip the boundaries of any one discipline and that represent the kind of open-ended, complex issues they will face as critical, creative, and thoughtful adults navigating a complex and interconnected world.

Quest 2 Student Learning Outcomes (SLOs):

At the conclusion of this Quest 2 course, students will be able to...

- Identify, describe, and explain the cross-disciplinary dimensions of a pressing societal issue or challenge as represented by the social sciences and/or biophysical sciences incorporated into the course. (Content)
- Critically analyze quantitative or qualitative data appropriate for informing an approach, policy, or praxis that addresses some dimension of an important societal issue or challenge. (Critical Thinking)
- Develop and present, in terms accessible to an educated public, clear and effective responses to proposed approaches, policies, or practices that address important societal issues or challenges (Communication)
- Connect course content with critical reflection on their intellectual, personal, and professional development at UF and beyond. (Connection)

<u>Social and Behavioral Sciences Description</u>: Social and behavioral science courses provide instruction in the history, key themes, principles, terminology, and underlying theory or methodologies used in the social and behavioral sciences. Students will learn to identify, describe and explain social institutions,

structures or processes. These courses emphasize the effective application of accepted problem-solving techniques. Students will apply formal and informal qualitative or quantitative analysis to examine the processes and means by which individuals make personal and group decisions, as well as the evaluation of opinions, outcomes or human behavior. Students are expected to assess and analyze ethical perspectives in individual and societal decisions.

Social and Behavioral Sciences SLOs:

At the conclusion of this Social and Behavioral Science course, students will be able to...

- Identify, describe, and explain key themes, principles, and terminology; the history, theory and/or methodologies used; and social institutions, structures and processes. (Content)
- Apply formal and informal qualitative or quantitative analysis effectively to examine the
 processes and means by which individuals make personal and group decisions. Assess and
 analyze ethical perspectives in individual and societal decisions. (Critical Thinking)
- Communicate knowledge, thoughts and reasoning clearly and effectively. (Communication)

<u>International Description</u>: This designation is always in conjunction with another program area: International courses promote the development of students' global and intercultural awareness. Students examine the cultural, economic, geographic, historical, political, and/or social experiences and processes that characterize the contemporary world, and thereby comprehend the trends, challenges, and opportunities that affect communities around the world. Students analyze and reflect on the ways in which cultural, economic, political, and/or social systems and beliefs mediate their own and other people's understanding of an increasingly connected world.

International Designation SLOs:

At the conclusion of this course with an International designation, students will be able to...

- Identify, describe, and explain the historical, cultural, economic, political, and/or social experiences and processes that characterize the contemporary world. (Content)
- Analyze and reflect on the ways in which cultural, economic, political, and/or social systems and beliefs mediate understandings of an increasingly connected contemporary world. (Critical Thinking)
- The international designation is always in conjunction with another category. Communication outcomes are listed in those subject areas. (Communication)

Course Objectives and Student Learning Outcomes:

Objectives

The Quest 2, Gen Ed Social and Behavioral Sciences, and International Designation objectives, described above, will be accomplished in this course by:

- Comprehensively exploring the global food economy, and the impacts of supply and demand, consumer preferences, and cultural influences on food choices.
- Presenting a model of the global food system that highlights the interconnectedness of food security, sustainability, physical health, and planetary/environmental health.

- Comparing multicultural behaviors and eating habits around the world, and their impact on the environment.
- Broadening perspectives from local to regional to international on food, environment, health, economic, and social issues.

Student Learning Outcomes

Reflecting the curricular structure of Quest 2 and the Gen Ed Social and Behavioral Sciences and International designations above, after taking *Feeding the Planet: Nutrition, Sustainability, and the Economics of Eating,* students will be able to:

- Identify the social and economic determinants of dietary patterns around the world, and discuss the health implications of different eating styles. (Content SLOs for Q2 and International)
- Describe the basic principles of food economics, and how they impact production, distribution, and consumption of food around the globe. (Content SLO for Social/Behavioral Sciences)
- 3. Evaluate the interconnectedness of food systems and planetary health, and synthesize the meaning of sustainability in the context of a food system. (Critical Thinking SLOs for Q2, Social/Behavioral Sciences, and International)
- 4. Propose potential solutions for feeding a growing global population in a healthful, economically-feasible, and environmentally responsible way, and identify potential barriers to implementing such solutions. (Communication SLOs for Q2, Social/Behavioral Sciences, and International)
- 5. Recognize how you, as an individual, and you, as a part of a community, can personally contribute now and in your career to addressing food security, sustainability, and environmental issues. (Connection SLO for Q2)

Required Texts:

There is no textbook for this course, but various articles, videos, etc. (listed below in the Course Schedule) will be made available through the class Canvas page.

Course Schedule:

Week	Topic Area			
	UNIT 1: The Global Food Economy			
1 (Jan 12/14)	Theme: Getting Started Faculty Facilitator: Andrade			
	Tuesday: Introduction to the Big Question: Can we feed a growing global population in a healthful, economically feasible, and environmentally responsible way?			
	Thursday: Reflection			
	Required Readings: n/a			
2 (Jan 19/21)	Theme: What Do We Eat, and Why? Faculty Facilitators: Andrade			
	Tuesday: Discussion: Impact social/environment has on dietary patterns/habits			
	Thursday: Reflection & Final project discussion			
	Required Readings:			
	What the World Eats. National Geographic Magazine.			
	(https://www.nationalgeographic.com/what-the-world-eats/) *Review this website and come to class prepared to discuss the trends you observed in global eating behaviors.			
	 Stern PC. Toward a coherent theory of environmentally significant behavior. <i>Journal of Social Issues</i>. 2000; 56(3): 407-424. (17 pages) Plus choose one of the following: 			
	Bandura A. Social cognitive theory: An agentic perspective. <i>Annual Review of Psychology</i> . 2001; 52: 1-26. (26 pages)			
	 Ajzen, I. The theory of planned behavior. Organizational Behavior and Human Decision Processing. 1991; 50: 179-211. (32 pages) 			
3 (Jan 26/28)	Theme: Statistical/Analytical Methods: Qualitative Faculty Facilitator: Andrade			
	Tuesday : Discussion: How do we analyze and interpret large qualitative datasets (eating practices, behaviors, patterns)? Activity: Analyzing a large dataset			
	Thursday: Reflection			
	Required Readings:			
	 Creswell JW, Hanson WA, Clark VL, Morales A. Qualitative research designs: Selection and implementation. The Counseling Psychologist. 2007; 35(2): 236-264. (28 pages) 			

- Neergaard MA, Olesen F, Andersen RS, Sondergaard J. Qualitative description The poor cousin of health research? *BMC Medical Research Methodology*. 2009; 9: 1-5. (5 pages)
- Bradley EA, Curry LA, Devers KJ. Qualitative data analysis for health services research: Developing taxonomy, themes and theory. *Health Research and Educational Trust*. 2007; 42(4): 1758-1772. (14 pages)

Graded Assignments/Activities:

Qualitative Survey Data (Eating Motivations and Behaviors) (10 points)

4 (Feb 2/4)

Theme: Introduction to Food Economics

Faculty Facilitators: Farnsworth

Tuesday: Discussion: Historical and current events related to food supply and demand

Thursday: Market Trading Experiment/Reflection

Required Readings:

- Gouel C, Guimbard H. Nutrition Transition and the Structure of Global Food Demand. American Journal of Agricultural Economics. 2019; 101(2): 383-403. (https://doi.org/10.1093/ajae/aay030) (20 pages)
- Ritchie H. How much of the world's land would we need in order to feed the global population with the average diet of a given country? 2017.
 (https://ourworldindata.org/agricultural-land-by-global-diets) (8 pages)

Additional Recommended Resources:

- Malthus, Thomas Robert. An Essay on the Principle of Population. 1872.
- Krugman P, Wells R. Microeconomics. 2012. Chapter 2.

Graded Assignments/Activities:

Market Trading Experiment (10 points)

5 (Feb 9/11)

Theme: Food Systems: Where Does Food Come From?

Faculty Facilitator: Farnsworth

Tuesday: Discussion: Global food supply

Thursday: Reflection

Required Readings:

 Nguyen H. Sustainable Food Systems Concept and Framework. Food and Agriculture Organization of the United Nations. 2018.
 (http://www.fao.org/3/ca2079en/CA2079EN.pdf) (8 pages)

Additional Recommended Resources:

 Committee on a Framework for Assessing the Health, Environmental, and Social Effects of the Food System; Food and Nutrition Board; Board on Agriculture and Natural Resources; Institute of Medicine; National Research Council; Nesheim MC, Oria M, Yih PT, editors. A Framework for Assessing Effects of the Food System. Washington (DC): National Academies Press (US); 2015 Jun 17. Summary. (https://www.ncbi.nlm.nih.gov/books/NBK305165/)

 Nutrition and Food Systems - A report by the High Level Panel of Experts on Food Security and Nutrition of the Committee on World Food Security. Rome: HPLE; 2017. (http://www.fao.org/3/a-i7846e.pdf)

UNIT 2: Food Security and Sustainability

6 (Feb 16/18)

Theme: Food Security
Faculty Facilitators: Morgan

Tuesday: Discussion: Society/Environment and Food Security/Insecurity

Thursday: Quizzam 1

Required Readings:

- Azam-Ali S. Crop insecurity: What is the future of our food? *Financial Times*. 2018. (https://www.ft.com/content/843c2bbc-379a-11e8-8eee-e06bde01c544) (12 pages)
- Meade B, Thome K. International Food Security Assessment, 2017-2027. USDA
 Economic Research Service. 2017.
 (https://www.ers.usda.gov/webdocs/publications/84128/gfa-28.pdf?v=0) (9 pages)

Additional Recommended Resources:

- Brown L. Full Planet, Empty Plates: The New Geopolitics of Food Scarcity. W. W.
 Norton & Company. 2012.
- Food and Agriculture Organization of the United Nations. The state of food security and nutrition in the world: Building climate resilience for food security and nutrition. 2018. (http://www.fao.org/3/I9553EN/i9553en.pdf)

7 (Feb 23/25)

Theme: What is Sustainability? Faculty Facilitator: Farnsworth

Tuesday: Discussion: Current events that may impact global food sustainability

Thursday: Rest/Recharge day

Required Readings:

- Pimentel D, Pimentel M. Sustainability of meat-based and plant-based diets and the environment. *Am J Clin Nutr*. 2003; 78(3): 660S-663S. (3 pages)
- Peters CJ, Picardy J, Darrouzet-Nardi A, et al. Carrying capacity of U.S. agricultural land: Ten diet scenarios. *Elementa: Science of the Anthropocene*. 2016; 4: 000116. (15 pages)
- Fitzherbert EB, Struebig MJ, Morel A, et al. How will oil palm expansion affect biodiversity? *Trends in Ecology & Evolution*. 2008; 23(10): 538-545. (7 pages)
- Koh LP, Wilcove DS. Cashing in palm oil for conservation. *Nature*. 2007; 448(7157): 993-994. (2 pages)

	 Additional Recommended Resources: Food and Agriculture Organization of the United Nations Food-based dietary guidelines: http://www.fao.org/nutrition/education/food-dietary-guidelines/en/ World Health Organization, A healthy diet sustainably produced:
	Theme: Sustainable Food Systems in Action Field Trips
8	Faculty Facilitators: Andrade
(Mar 2/4)	Tuesday: Virtual visit to the Garden and Food Hubs (11-12:30pm)
	Thursday: Reflection on visit
	Required Readings: n/a
	Graded Assignments/Activities:
	Reflection (10 points)
	Theme: Sustainable Food Systems in Action Field Trips (continued)
9 (Mar 9/11)	Faculty Facilitator: Andrade
	Tuesday: Living soil documentary
	Thursday: Reflection
	Required Readings: n/a
	Graded Assignments/Activities:
	Reflections (10 points)
	Theme: Debate and Mid-point review on reflections, final one
10 (Mar 16/18)	Faculty Facilitators: Andrade
	Tuesday: In-class Debate 1/Reflection: "Are Vegetarian Diets Superior?"
	Thursday: Mid-point reflection
	Required Readings: n/a
	Graded Assignments/Activities:
	 In-class Debate 1: "Are Vegetarian Diets Superior?" (50 points)
	UNIT 3: What We <i>Do</i> Eat and What We <i>Should</i> Eat

Theme: What Should We Eat, and Why? 11 Faculty Facilitator: Acosta (Mar 23/25) Tuesday: Health implications of different eating patterns around the world Thursday: In-class Debate 2/ Reflection: "Insect Protein: Should We All Eat Bugs?" **Required Readings:** Willett W, Rockstrom J, Loken B, et al. Food in the Anthropcene: the EAT-Lancet Commission on healthy diets from sustainable food systems. Lancet. 2019; 393: 447-492. (https://www.thelancet.com/pdfs/journals/lancet/PIIS0140-6736(18)31788-4.pdf?utm campaign=tleat19&utm source=HubPage) (45 pages) Additional Recommended Resources: Shim JS, Oh K, Kim HC. Dietary assessment methods in epidemiologic studies. Epidemiology Health. 2014; 36: e2014009. **Graded Assignments/Activities:** • In-class Debate 2: "Insect Protein: Should We All Eat Bugs?" (50 points) Theme: Statistical/Analytical Methods: Quantitative 12 Faculty Facilitator: Andrade (Mar 30/Apr 1) Tuesday: In-class Activity: Guided Analysis of Quantitative Data Thursday: Quizzam 2 **Required Readings:** Familiarize yourself with the NHANES website and guestionnaires: National Health and Nutrition Examination Survey. Centers for Disease Control and Prevention. https://www.cdc.gov/nchs/nhanes/index.htm. NHANES Questionnaires, Datasets, and Related Documentation. Centers for Disease Control and Prevention. https://wwwn.cdc.gov/Nchs/Nhanes/. **Graded Assignments/Activities**: In-class Activity: Guided Analysis of Quantitative Data (National Health and Nutrition Examination Survey, NHANES) (10 points) **Theme: Food Waste** Faculty Facilitators: Andrade 13 (Apr 6/8) Tuesday: Plate waste discussion/ keeping track at home; live demo. Video record waste (beverages included) Thursday: Reflection

Required Readings:

- Bolos LA, Lagerkvist CJ, Nayga RM. Consumer Choice and Food Waste: Can Nudging Help? Choices. 2019; Quarter 1. (http://www.choicesmagazine.org/choices-magazine/theme-articles/examining-food-loss-and-food-waste-in-the-united-states/consumer-choice-and-food-waste-can-nudging-help) (7 pages)
- Grant K, Gallardo RK, McCluskey JJ. Are Consumers Willing to Pay to Reduce Food Waste? Choices. 2019; Quarter 1. (http://www.choicesmagazine.org/choices-magazine/theme-articles/examining-food-loss-and-food-waste-in-the-united-states/are-consumers-willing-to-pay-to-reduce-food-waste) (7 pages)

Also watch this video:

Stuart T. The global food waste scandal. TedTalk.
 (https://www.ted.com/talks/tristram_stuart_the_global_food_waste_scandal)
 (Video: 14 minutes)

Additional Recommended Resources:

- Dunning RD, Johnson LK, Boys KA. Putting Dollars to Waste: Estimating the Value of On-Farm Food Loss. *Choices*. 2019; Quarter 1. (http://www.choicesmagazine.org/choices-magazine/theme-articles/examining-food-loss-and-food-waste-in-the-united-states/putting-dollars-to-waste-estimating-the-value-of-on-farm-food-loss)
- Wilson NLW, Miao R, Weis C. When in Doubt, Throw It Out! The Complicated
 Decision to Consume (or Waste) Food by Date Labels. *Choices*. 2019; Quarter 1.
 (<a href="http://www.choicesmagazine.org/choices-magazine/theme-articles/examining-food-loss-and-food-waste-in-the-united-states/when-in-doubt-throw-it-out-the-complicated-decision-to-consume-or-waste-food-by-date-labels)
- Minor T, Hitaj C, Kuchler R, Skorbiansky SR, Roe B, Thornsbury S. Exploring Food Loss from Farm-to-Retail in the Produce Industry. *Choices*. 2019; Quarter 1. (http://www.choicesmagazine.org/choices-magazine/theme-articles/examining-food-loss-and-food-waste-in-the-united-states/exploring-food-loss-from-farm-to-retail-in-the-produce-industry)

Graded Assignments/Activities:

• Plate Waste Analysis Activity (10 points)

14 (Apr 13/15)

Theme: What We Should Eat Versus What We Do Eat: The Discrepancy

Faculty Facilitators: Acosta

Tuesday: Discussion: Is there a viable solution to address malnutrition, food insecurity, chronic diseases, climate change, and planetary health via changes in food systems and dietary behaviors?

Thursday: Reflection

Required Readings:

Jennings B. Ethical Aspects of Sustainability. Center for Humans and Nature.
 (https://www.humansandnature.org/ethical-aspects-of-sustainability) (2 pages)

- Jackson R. Unpacking the ethics of food sustainability: health, harmony, and beyond.
 Nuffield Council on Bioethics. (http://nuffieldbioethics.org/blog/unpacking-ethics-food-sustainability-health-harmony) (1 page)
- Askew K. Fast food versus slow food: A choice of 'ethics and sustainability'. Food
 Navigator. (https://www.foodnavigator.com/Article/2018/09/24/Fast-food-versus-slow-food-A-choice-of-ethics-and-sustainability) (2 pages)
- Dargie J. Biotechnology, GMOs, Ethics and Food Production. Food and Agriculture Organization of the United Nations.
 (http://www.fao.org/News/2001/stockholm/biotech.pdf) (21 pages)

Additional Recommended Resources:

- The EAT-Lancet Commission Launch Lecture in Oslo
 (https://www.youtube.com/watch?v=6ZU9kQpXLjA&list=PLCuQknRNIH2FZKV_9k9H
 BYRRVsAZQOkwv&index=2)
- How Can Food Solve Global Issues? Gunhild Stordalen
 (https://www.youtube.com/watch?v=z6zyT1qF6hY&list=PLCuQknRNIH2FZKV_9k9HBYRRVsAZQOkwv&index=4)
- The EAT-Lancet Launch Lecture by Johan Rockstrom and Walter Willett (https://www.youtube.com/watch?v=mnlaBhD-124&index=6&list=PLCuQknRNIH2FZKV 9k9HBYRRVsAZQOkwv)
- Changing the Food System is a Necessity
 (https://www.youtube.com/watch?v=kC2xTdWuJks&index=7&list=PLCuQknRNIH2FZ
 KV 9k9HBYRRVsAZQOkwv)
- How Can You Contribute to the Food System Change Gunhild's Call to Action
 (https://www.youtube.com/watch?v=xfrfBOueX60&index=8&list=PLCuQknRNIH2FZKV_9k9HBYRRVsAZQOkwv)

15 (Apr 20/22)

Theme: <u>How Do We Do Better?</u> Faculty Facilitator: Andrade

Tuesday: Discussion: What would need to happen for a restructuring of the global food system to occur? Evaluation and Wrap-Up: UF course evaluations, Quest Student Survey, visit from Quest Ambassadors about additional course offerings, peer-mentoring, and research opportunities in the Quest curriculum.

Thursday: Quizzam 3

Required Readings: n/a

Additional Recommended Resources:

 Towards a Common Food Policy for the European Union: The Policy Reform and Realignment that is Required to Build Sustainable Food Systems in Europe. iPES Food. (http://www.ipes-food.org/ img/upload/files/CFP FullReport.pdf)

FINAL PROJECT: "Gathering Around a Global Table"

16

(Date and time
TBA; to be
assigned by
Registrar)

*In lieu of a traditional Final Exam, students will present their projects during the Final Exam period.

Faculty Facilitators: All (Acosta, Andrade, Farnsworth)

Graded Assignments/Activities:

• "Gathering Around a Global Table" - Reflections (110 points)

Assigned Work:

You must complete all of the assigned work in order to pass the class.

Quizzams:* (30% of grade)

- Quizzam 1 (Covering Weeks 1-5): 50 points
 - Format: 40 multiple choice questions (1 point each) and 10 true/false questions (1 point each)
 - Advances SLOs 1, 2
- Quizzam 2 (Covering Weeks 6-10): 50 points
 - Format: 40 multiple choice questions (1 point each) and 10 true/false questions (1 point each)
 - o Advances SLOs 3, 5
- Quizzam 3 (Covering Weeks 11-14): 50 points
 - Format: 40 multiple choice questions (1 point each) and 10 true/false questions (1 point each)
 - Advances SLOs 1, 3, 4, 5

Reflection: (20% of grade) – 10 reflections (10 points each)

- Throughout this course, you will be reflecting on the information presented to you. In either a video format or document, address these questions:
 - o How will you explain to family members of friends the importance of this situation?
 - o Based on you career, how will you use this information?
 - o Advances SLOs 1, 3, 4

<u>Presentation</u>: (20% of grade)

- Gathering Around a Global Table (Week 16): 110 points
 - Based on your reflections throughout this course, present for 20 minutes around the challenges and potential solutions for creating a healthful, sustainable, and planetfriendly food system.
 - Grading:
 - Presentation Materials (PowerPoint or other visuals): 80 points

^{*}A "quizzam" in this course is a hybrid between a quiz and an exam. These evaluations will have more substance and rigor than a traditional quiz, but are not weighted as heavily as a typical exam. The format of each Quizzam will be a combination of multiple choice and short answer critical thinking questions.

- The presentation needs to include the primary food or nutrition-related concerns and a proposed solution. At minimum, 10 references need to be included.
- Presentation: 20 points
 - Grading will be based on cohesiveness, clarity, organization, engagement.
- Peer Evaluation: 10 points
 - Each student will earn 10 points for filling out a thoughtful peer evaluation of your peers.
- Advances SLOs 1, 2, 3, 4, 5

Class assignments:* (30% of grade)

- *"Participation" means coming to class prepared, attentively and thoughtfully engaging with the material, and interacting with peers and instructors in a courteous, respectful, and professional manner.
 - Guided Analysis of Qualitative Survey Data (Eating Motivations and Behaviors) (Week 3): 10
 points
 - Each student will be asked to respond to 5 open-ended questions about their eating behaviors and motivations for eating (adopted from Deliens et al, 2014).
 - Class will identify at least three common themes based on all responses.
 - o Grading:
 - Preparedness: 4 pointsEngagement: 4 pointsProfessionalism: 2 points
 - Advances SLO 1
 - Market Trading Experiment (Week 4): 10 points
 - This activity provides an interactive demonstration of supply and demand, cost curves, and how markets differ throughout the world.
 - Students will be randomly assigned to be a buyer or a seller of a commodity, each with their own private value.
 - Reflection and Discussion: What did we learn from the Market Trading Experiment? How does this experiment relate to markets that determine the price of food commodities? How do we think about households in developing countries who both produce and consume food? What types of policies exist to help producers and consumers? Are these policies appropriate for the challenges faced in every country?
 - Grading:

Preparedness: 4 pointsEngagement: 4 pointsProfessionalism: 2 points

- Advances SLO 2
- Debates
 - Debate 1 (Week 10): 50 points
 - Topic: "Are Vegetarian Diets Superior?"
 - Advances SLOs 1, 2, 3, 5
 - o Debate 2 (Week 11): 50 points

- Topic: "What is the 'Best' Source of Protein?"
- Advances SLOs 1, 2, 3
- Debate Structure and Guidelines:
 - There are two debate "roles": Pro Side and Con Side. Each student will get to play a different role for each debate, and thus will cycle through all roles over the course of the semester.
 - The Pro Side and Con Side roles for each debate will be defined as:

Debate 1: "Are Vegetarian Diets Superior?"			
Pro Side	Vegetarian diets provide superior nutrition, are economically- friendly, and are far less detrimental to the environment than omnivorous diets. People around the world should be		
Con Side	encouraged to adopt more plant-based eating patterns. Vegetarian diets may lack essential nutrients, and the environmental and economic costs of vegetarian diets can be just as great as with omnivorous diets. It is dangerous to generalize and recommend that everyone follow a plant-based diet.		
Debate 2: "	Insect Protein: Should We All Eat Bugs?"		
Pro Side	Insects provide a nutritionally-sound, sustainable protein source that should be widely adopted around the globe.		
Con Side	There are health and acceptability concerns associated with eating bugs, and there are other, equally effective ways to promote sustainably-sourced protein. Eating insects is not an acceptable solution for everyone.		

- For each debate, students will be evenly distributed between the pro and con side.
- All students on the Pro Side and the Con Side will <u>individually</u> prepare a short (1 page) Position Brief, providing some background on the topic and outlining their key points and arguments. These Position Briefs should be used for reference during the debate and will be submitted at the end of the debate.
- Students should plan to coordinate ahead of time with other students who are arguing on the same side, to ensure that the group presents a cohesive and logical argument on the debate day. They should also think about who will say what, and in what order.
- On the debate day, the format will be as follows:
 - The Pro Side will have 10 minutes to present their argument.
 - The Con Side will then have 10 minutes to present their argument.
 - There will be a 10-minute break, during which each side will confer and formulate a rebuttal for the other side.
 - The Pro Side will have 5 minutes to present their rebuttal.
 - The Con Side will have 5 minutes to present their rebuttal.
- o Grading:

All debates will be graded as follows:

For Pro Side and Con Side Roles...

Preparedness: 20 points

- Did the student thoughtfully prepare for the debate with a cohesive and well-written Position Brief?
- Engagement: 20 points
 - Did the student actively participate in the debate during the initial argument and/or the rebuttal?
- Professionalism: 10 points
 - Did the student interact with peers and faculty in a courteous and respectful manner during the debate?

Ground Rules:

- In order to create a climate for open and honest dialogue, and to encourage the broadest range of viewpoints, it is important for class participants to treat each other with respect. Name calling, accusations, verbal attacks, sarcasm, and other negative exchanges during classroom debates are counter-productive and will not be tolerated.
- Remember that learning is about sharing different views and actively listening to those with different views. Remember that it is okay to disagree. The purpose of dialogue, discussion, and debate is **not** to reach a consensus, nor to convince each other of different viewpoints. Rather, the purpose of our classroom debates is to reach higher levels of learning by examining different viewpoints and opinions.
- Guided Analysis of Quantitative Data (National Health and Nutrition Examination Survey, NHANES) (Week 12): 10 points
 - Students will need to bring their computers to class. Select data from the 2015-2016
 NHANES will be posted on the Canvas site.
 - Students will be divided into groups of about four. Each group will be assigned a different data set to analyze and to compare to standardized recommendations in the United States. The analysis will consist of identifying the total number of individuals who follow a specific diet and the means and ranges of the other data. Examples of data that groups may be assigned include:
 - Macronutrients consumed compared to U.S. DRIs
 - Vitamins consumed compared to U.S. DRIs
 - Minerals consumed compared to U.S. DRIs
 - Average Lab Values (Glucose, Cholesterol, Triglycerides, Calcium, Iron) of participants compared to Standard Reference Values
 - Average BMI, Waist Circumference, and Blood pressure of participants compared to Standard Reference Values
 - Once the analysis is complete, each group will write and submit a half-page summary of their findings.
 - Reflection and Discussion: What do the data tell us? What inferences and conclusions can we draw? Why are these data important in the context of global nutrition and sustainability... what story do they tell? What are the limitations of our analysis? (10 minutes)
 - o Grading:
 - Preparedness: 4 points

Engagement: 4 pointsProfessionalism: 2 points

Advances SLO 1

- Plate Waste Analysis Activity (Week 13): 10 points
 - At home, observe the amount of food, condiments, herbs, spices, etc that may be wasted (past expiration date and needs to be thrown out, food that has been disposed of, etc). Indicate what type of food this was – fresh fruits/vegetables with peels and inedible particulates, processed, etc.
 - Reflection and Discussion: Each student will share their findings from the Plate Waste
 Analysis Activity with the class
 - Grading:

Preparedness: 4 pointsEngagement: 4 pointsProfessionalism: 2 points

Advances SLOs 1, 2, 3, 5

Evaluation of Grades:

Graded Activity	Points	Percentage of Grade
Quizzams (3)	50 points each (150 points total) 30%	
Reflections (10)	10 points each (100 points total)	20%
Group Project/Presentation	110 points	20%
*Class Assignments	140 points	30%
Total	500 points	100%

^{*}Class assignments will be graded based on three criteria: Preparedness, Engagement, and Professionalism. Please see individual assignment descriptions, above, for descriptions of how these criteria will be applied to each activity.

Grading Scale:

Points:	Percent:	Letter:
465-500	93-100%	A
450-464	90-92.9%	A-
435-449	87-89.9%	B+
415-434	83-86.9%	В
400-414	80-82.9%	B-
385-399	77-79.9%	C+
365-384	73-76.9%	С
350-364	70-72.9%	C-
335-349	67-69.9%	D+
315-334	63-66.9%	D
300-314	60-62.9%	D-
<300	<60%	E

UF Grades and Grading Policies: https://catalog.ufl.edu/UGRD/academic-regulations/grades-grading-policies/

Policies:

Class Attendance and Make-Up Work:

The interactive, discussion-based nature of this class requires that students be present to fully engage in course activities. Each student is allowed two discretionary/unexcused absences for the semester. After that, each unexcused absence will result in a deduction of 5 points from your final grade. Requirements for excused absences and make-up work are consistent with university policies, and can be found at: https://catalog.ufl.edu/ugrad/current/regulations/info/attendance.aspx. If an extenuating circumstance or conflict beyond your control prevents you from attending class, you must reach out to the course director within 1 business day of the absence to provide documentation of the circumstance or event that prevented you from attending.

Tardiness is unacceptable in the workplace and therefore also inappropriate in the classroom. Tardiness of more than 10 minutes will be treated like an absence. It will be considered an excused absence only if the student provides documentation to substantiate an extenuating circumstance that led to the tardiness. Otherwise, it will either count as one of the two allowed discretionary absences, or be considered an unexcused absence (if the two discretionary days have already been used).

Late work will not be accepted, except when associated with a valid and documented excused absence.

Students Requiring Accommodations:

The Disability Resource Center coordinates the needed accommodations of students with disabilities. This includes registering disabilities, recommending academic accommodations within the classroom, accessing special adaptive computer equipment, providing interpretation services and mediating faculty-student disability related issues. Students requesting classroom accommodation must first register with the Dean of Students Office. The Dean of Students Office will provide documentation to the student who must then provide this documentation to the Instructor when requesting accommodation. Contact information: 0001 Reid Hall, 392-8565, https://disability.ufl.edu/.

Course Evaluation:

Student assessment of instruction is an important part of efforts to improve teaching and learning. At the end of the semester, students are expected to provide feedback on the quality of instruction in this course using a standard set of university and college criteria. These evaluations are conducted online at https://ufl.bluera.com/ufl/. Evaluations are typically open for students to complete during the last two or three weeks of the semester; students will be notified of the specific times when they are open. Summary results of these assessments are available to students at https://gatorevals.aa.ufl.edu/public-results/.

Class Demeanor:

Students are expected to arrive to class on time, stay the full class period, and behave in a manner that is respectful to the instructor and to fellow students. This is a discussion-based class that follows the "flipped classroom" model. Thus, you are expected to come to class having read/reviewed any assigned materials. Electronic devices should be turned off and placed in closed bags, except when they are needed for class activities as determined by the instructors. Opinions held by other students should be respected in discussion, and conversations that do not contribute to the discussion should be kept to a minimum.

Material and Supply Fees:

There are no additional fees for this course.

University Honesty Policy:

As a student at the University of Florida, you have committed yourself to uphold the Honor Code, which includes the following pledge: "We, the members of the University of Florida community, pledge to hold ourselves and our peers to the highest standards of honesty and integrity." You are expected to exhibit behavior consistent with this commitment to the UF academic community, and on all work submitted for credit at the University of Florida, the following pledge is either required or implied: "On my honor, I have neither given nor received unauthorized aid in doing this assignment."

It is assumed that you will complete all work independently in each course unless the instructor provides explicit permission for you to collaborate on course tasks (e.g. assignments, papers, quizzes, exams). Furthermore, as part of your obligation to uphold the Honor Code, you should report any condition that facilitates academic misconduct to appropriate personnel. It is your individual responsibility to know and comply with all university policies and procedures regarding academic integrity and the Student Honor Code. Violations of the Honor Code at the University of Florida will not be tolerated. Violations will be reported to the Dean of Students Office for consideration of disciplinary action. For more information regarding the Student Honor Code, please see: https://sccr.dso.ufl.edu/process/student-conduct-code/.

Writing Studio:

The Writing Studio is committed to helping University of Florida students and faculty meet their academic and professional goals by becoming better writers. Individual assistance is provided and students of all levels and disciplines are welcome. The Writing Studio is located at 2215 Turlington Hall. Contact them at 352-846-1138 or on the web at https://writing.ufl.edu/writing-studio/.

Campus Helping Resources:

Students experiencing crises or personal problems that interfere with their general wellbeing are encouraged to utilize the university's counseling resources. The Counseling & Wellness Center provides confidential counseling services at no cost for currently enrolled students. Resources are available on campus for students having personal problems or lacking clear career or academic goals, which interfere with their academic performance.

Service	Location	Phone/Email	Web site	Services provided
University Counseling and Wellness Center	3190 Radio Road	352-392-1575	https://counseling.ufl.edu/	Counseling Services Groups and Workshops Outreach and Consultation Self-Help Library Wellness Coaching

U Matter We Care		umatter@ufl.edu	https://umatter.ufl.edu/	Support for students in distress
Career Connections Center	J. Wayne Reitz Union	352-392-1601	https://career.ufl.edu/	Career development assistance and counseling