

**Feeding the Planet: HUN 2192**

Nutrition, Sustainability, and the Economics of Eating

**Quest 2**

## I. General Information

**Class Meetings**

- Semester: Spring 2025
- Time: MWF period 4 (10:40-11:30am)
- Locations: M-Fine Arts Building “C” Room 120  
W- AHO Room 215  
Friday: Fine Arts Building “B” room 103

Instructor: Dr. Beth Gankofskie Assistant Instructional Professor (Food Science and Human Nutrition)

- Office: Building 120, Room 104E
- Office Hours: Wednesdays 12-1Pm, or by appointment on Zoom
- Contact: [gankofskie@ufl.edu](mailto:gankofskie@ufl.edu) 352-273-3471

**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 local field trips and classroom discussion and debates, students will consider 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.

### Quest and General Education Credit

- Social & Behavioral Sciences
- Secondary Gen Ed designation, you have options and must identify the Gen Ed identification you need and report it. *Contact your adviser to designate this course.*

This course accomplishes the Quest and General Education objectives of the subject areas listed above. A minimum grade of C is required for Quest and General Education credit. Courses intended to satisfy Quest and General Education requirements cannot be taken S-U.

### Required Readings and Works

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.

Materials and Supplies Fees: n/a

### II. Graded Work

#### Description of Graded Work

Survey Data Analysis	50 points	10%
Reflections (10) 20 points each	(200 points total)	40%
Debates (2) 50 points each	(100 points total)	20%
Group Project	50 points	10%
3 Cumulative Exams (30 points each)	100 points	20%

**Total 500 points 100%**

**Late work policy:** All assignments are due by Friday at 11:59pm EST, unless otherwise stated in Canvas. Assignments submitted after this due date will be penalized with a late penalty of 10% per day, for up to 3 days. After this, assignments will not be accepted and will be given a grade of zero. For example, if an assignment is due on Friday at 11:59pm EST, and submitted on Saturday at 12:01am, 10% is deducted. On Sunday, a 20% penalty and on Monday, a 30% penalty. After Monday, the assignment would not be accepted and would receive a grade of zero. Extensions will be granted if there are extenuating

circumstances, such as an illness, serious accident or family emergency, or for other acceptable reasons in accordance with university policies on absences.

[Survey Data Analysis: 50 points \(10% of grade\)](#)

- **Grading of this dietary recall assignment**

- I. **Dietary Recall:**

- o Recording a 1-day 24-hour recall (10 points)
    - o Analysis of 1-day 24-hour recall (20 points)
    - o Identify motivation/behaviors for dietary habits (15 points)
    - o Pros/cons of this method (5 points)

- II. **Reflection assignments:** 10 reflections at 20 points each for a total of 200 points (40% of grade)

- In certain weeks of the course, you will reflect upon the week's topic to address what new information you learned, what is additional information that you would have liked to learn about, and how you will apply this information to your other courses/career/graduate school.

- **Grading of the reflection assignment:**

- o Connection to other courses/career/graduate school: 10 points
        - o Connection to class outcomes/discussion: 5 points
        - o No spelling/grammatical errors: 2 points
        - o References correctly included: 3 points

- III. **Debate Assignments: 2 debates at 50 points each (20% of grade)**

- **Debate 1:** 50 points

- o Topic: "Save our food: vegetarian vs animal diets?"
      - o Topic: "Alternative proteins: Insects vs cultured meat?"
      - o Topic: "Growing our food: Urban vs vertical farming?"
      - o Topic: "Fishing sustainably: Conventional vs aqua farming?"

- **Debate 2:** 50 points

- o Topic: "Future of food sustainability: Obtaining our food Globally or Locally?"

- o Topic: “Food policies: Federal government or Local government?”
- o Topic: “Biotechnology: Conventional vs cultivated?”
- o Topic: “Dating game: Need for best buy and other expiration dates on labels?”

- **Grading of debate includes the following:**

- o Position paper for the debate: 30 points
- o Engagement during the debate: 10 points
- o Professionalism during the debate: 10 points

**IV. Group Project: 50 points (10% of grade)**

- Working in a group of no more than 4 students, you will choose a country and describe the primary food or nutrition-related concerns in that area of the world, the history of how these issues evolved, and what threats they present.

You and your group will then facilitate a 20-minute class discussion (5 minutes for each student in the group) around the challenges and potential solutions for creating a healthful, sustainable, and planet friendly food system in that country/region.

- **Grading Group project:**

- o Paper: 30 points
- o Presentation: 20 points

**V. Cumulative Final Exam: 30 points (10% of grade)**

- A multiple choice/true-false cumulative final exam will be administered during the day of the regularly scheduled final exam **May 1, 2025, 12:30-2:30pm**

Grading Scale For information on how UF assigns grade points, visit: <https://catalog.ufl.edu/UGRD/academicregulations/grades-grading-policies/>

A 93 – 100%	C 74 – 76.9%
A- 90 – 92.9%	C- 70 – 73.9%
B+ 87 – 89.9%	D+ 67 – 69.9%
B 84 – 86.9%	D 64 – 66.9%
B- 80 – 83.9%	D- 60 – 63.9%
C+ 77 – 79.9%	E <60%

## III. Annotated Weekly Schedule Week Topic Area

## UNIT 1: Eating Globally

January 13-17, 2025

**Topic: Getting Started****Monday:**

Introduction to the Big Question: Can we feed a growing global population in a healthful, economically feasible, and environmentally responsible way?

**Wednesday:** Introduction to the Big Question, cont'd

**Friday:** Discussion of Mehrabi reading **Required Readings:**

- Discussion paper:

1. Mehrabi Z, Ellis EC, Ramankutty N. The challenge of feeding the world while conserving half the planet. *Nature Sustainability*. 2018; 1:409-412 (4 pages)

2. Monbiot G. Lab-grown food will soon destroy farming – and save the planet

**Graded Assignments/Activities** for Jan 13-17:

- Reflection 1 and 2 about journal discussion **due January 17th** (20 points)

**Topic: What Do We Eat?**

January 22-24, 2025

**Monday:** NO CLASS - MLK

**Wednesday:** Guest Lecture: Dr. Kropp - Global perspective of what we eat around the world

**Friday:** Guest Lecture: Dr. Kropp - Discussion of Paolo article **Required Readings:** • Discussion paper:

1. Paolo D'Odorico, Joel A Carr, Kyle F Davis, Jampel Dell'Angelo, David A Seekell, Food Inequality, Injustice, and Rights, *BioScience*, Volume 69, Issue 3, March 2019, Pages 180–190, <https://doi.org/10.1093/biosci/biz002>

2. • National Geographic : What the world eats <https://www.nationalgeographic.com/what-the-world-eats/> • Downs, S.M., Fox, E.L. Uneven decline in food system inequality. Nat Food 2, 141– 142 (2021). <https://doi.org/10.1038/s43016-021-00247-3>

### Graded Assignments/Activities Jan 22-24<sup>th</sup>:

• Reflection about journal discussion due January 19 (20 points) 3 (Jan 22-26) Topic: What Should We Eat, and Why?

### January 27-31

**Monday:** Impact social/environment has on dietary patterns/habits

**Wednesday:** Continue the discussion of social/environmental impact on dietary habits

#### **Topic: What Should We Eat, and Why?**

**Monday:** Impact social/environment has on dietary patterns/habits

**Friday:** Discussion of Naja paper

#### Required Readings:

#### • DISCUSSION PAPERS:

1. Naja F, Hamadeh R. Nutrition amid the COVID-19 pandemic: A multi-level framework for action. Euro J Clinical Nutr. 2020; 74:1117-1121 (4 pages)
2. • Willett W, Rockstrom J, Loken B, et al. Food in the Anthropocene: 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](https://www.thelancet.com/pdfs/journals/lancet/PIIS0140-6736(18)31788-4.pdf?utm_campaign=tleat19&utm_source=HubPage)) (45 pages)
3. • Stern PC. Toward a coherent theory of environmentally significant behavior. Journal of Social Issues. 2000; 56(3): 407-424. (17 pages)

### Graded Assignments/Activities:

• Reflection of journal discussion **due January 31<sup>st</sup>.** (20 points)  
Topic: How do we measure what we eat?

**Monday:** Qualitative Research – It's in the eye of the beholder

**Wednesday:** Quantitative Research – Counting the pennies

**Friday:** Preparation for the debates

#### Required Readings:

1. • Alakaam AA, Castellanos DC, Bodizo J, Harrison L. The factors that influence dietary habits among international students in the United States. Journal of International Students. 2015; 5(2): 104-120 (16 pages)
2. • Baygi F, Mohammadi-Nasrabadi F, Zyriax BC, Jensen OC, Bygvraa DA, Oldenburg M, Nielsen JB. Global overview of dietary outcomes and dietary intake assessment methods in maritime settings: A systematic review. BMC Public Health. 2021;21:1579 (9 pages)
3. • Shim JS, Oh K, Kim HC. Dietary assessment methods in epidemiologic studies. Epidemiology Health. 2014; 36: e2014009.

### Graded Assignments/Activities:

• Survey data due February 7th (Eating Motivations, Behaviors and analysis of dietary habits) (50 points).

**Topic: Debate****February 3-7**

**Monday:** In-class debates

**Wednesday:** In-class debates

**Friday:** In-class debates

Required Readings: n/a

**Graded Assignments/Activities:**

- In-class Debates due February (50 points)

**UNIT 2: Food Security and Sustainability****Topic: Food Economics****February 10-14**

**Monday:** Guest speaker: Dr. Farnsworth - Historical and current events related to food supply and demand

**Wednesday:** Guest speaker: Dr. Kropp - Cost of food and impact on health/nutrition

**Friday:** Discussion of Gouel's article

**Required Readings:**

1. • Discussion paper: 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)
  2. • 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:
3. • Malthus, Thomas Robert. An Essay on the Principle of Population. 1872.
  4. • Krugman P, Wells R. Microeconomics. 2012. Chapter 2.

**Graded Assignments/Activities:**

Reflection of journal article due February 14th (20 points)

**Topic: What is Food Security****February 17-21**

**Monday:** Food security

**Wednesday:** Guest speaker: Dr. Kropp - Food security policies

**Friday:** Discussion of Eicher-Miller article

**Required Readings:**

- DISCUSSION PAPER: Eicher-Miller HA. A review of the food security, diet and health outcomes of food pantry clients and the potential for their improvement through food pantry interventions in the United States.
- 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)

#### Graded Assignments/Activities:

Reflection of journal discussion due February 21 (20 points)

#### **Topic: Food sustainability**

#### **February 24-28**

**Monday:** Impact of diet on global food sustainability

**Wednesday:** Analysis of the palm oil industry

**Friday:** Discussion of Peters article

#### Required Readings:

- Discussion paper: 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)
- 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)
- 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)

#### Graded Assignments/Activities:

Reflection of journal article due February 28 (20 points)

#### **Topic: Sustainable Food Systems in Action Field Trips**

#### **March 3-7**

**Monday:** Half the class visit to UF Field and Fork Gardens; other half view: Eating our way to extinction: <https://www.youtube.com/watch?v=LaPge01NQTQ>

**Wednesday:** Half the class visit to UF Field and Fork Gardens; other half view: Eating our way to extinction: <https://www.youtube.com/watch?v=LaPge01NQTQ>



**Friday:** Reflective thoughts towards the garden visit and the extinction documentary

Required Readings: n/a

**Graded Assignments/Activities:**

- Reflection of Field and Fork and Movie due March 7 (20 points)

UNIT III

**Topic: Food Systems: Where Does Food Come From?**

**March 10-14**

**Monday:** How safe is our food?

**Wednesday:** Global issues in the food supply chain

**Friday:** NO Class Prep for the debates

**Required Readings:**

1. • 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)

2. • 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/>)

**Graded Assignments/Activities:**

Reflection of eating safe due March 14 (20 points)

**March 15-23 Spring Break-no class**

**March 24-28**

**Topic: Debates**

**Monday:** In-class debates

**Wednesday:** In-class debates

**Friday:** In class-debates

**Graded Assignments/Activities:**

In-class Debates due March 28 (50 points)

**March 31-April 4th**

**Topic: Food Waste**

**Monday:** Plate waste discussion/ keeping track at home.

**Wednesday:** Future of food forum

**Friday:** Discussion of Grant article

**Required Readings:**

**• DISCUSSION PAPER:**

1. 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/examiningfood-loss-and-food-waste-in-the-united-states/are-consumers-willing-to-pay-toreduce-food-waste>) (7 pages)

2• Bolos LA, Lagerkvist CJ, Nayga RM. Consumer Choice and Food Waste: Can Nudging

Help? Choices. 2019; Quarter 1. (<http://www.choicesmagazine.org/choicesmagazine/theme-articles/examining-food-loss-and-food-waste-in-the-unitedstates/consumer-choice-and-food-waste-can-nudging-help>) (7 pages)

Also watch this video:

3• Stuart T. The global food waste scandal. TedTalk.

([https://www.ted.com/talks/tristram\\_stuart\\_the\\_global\\_food\\_waste\\_scandal](https://www.ted.com/talks/tristram_stuart_the_global_food_waste_scandal))

(Video: 14 minutes)

**Graded Assignments/Activities:**

Reflection plate waste and what you can do differently due April 4 (20 points)

**Topic: What can we do differently?**

**April 7-11**

**Monday:** Sustainable foods

**Wednesday:** Technology and the fear

**Friday:** Discussion of Dargie article online threaded discussion. No required time to be online. Due April 11, 11:59pm

**Required Readings:**

1• DISCUSSION PAPER: 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)

2• Jennings B. Ethical Aspects of Sustainability. Center for Humans and Nature.

(<https://www.humansandnature.org/ethical-aspects-of-sustainability>) (2 pages)

3• Jackson R. Unpacking the ethics of food sustainability: health, harmony, and beyond.

Nuffield Council on Bioethics. (<http://nuffieldbioethics.org/blog/unpacking-ethicsfood-sustainability-health-harmony>) (1 page)

Page 9

4• 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)

**Graded Assignments/Activities:**

Reflection of food forum and what we can do differently due April 11 (20 points)

**Topic: Gathering around a global table****April 14-18th**

**Monday:** Miscellaneous topics – Impact of external factors not discussed

**Wednesday:** Miscellaneous topics – How media makes it better.... Or not

**Friday:** Presentations

**April 21-23**

**Monday:** Presentations

**Wednesday:** Presentations

Required Readings: n/a

**Graded Assignments/Activities:**

- Gathering around a global table due April 23 (50 points)

## IV. Student Learning Outcomes (SLOs)

At the end of this course, students will be expected to have achieved the Quest and General Education learning outcomes as follows:

- **Content:** Students demonstrate competence in the terminology, concepts, theories and methodologies used within the discipline(s).
  - o 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 (Quest 2).
  - o Identify the social and economic determinants of dietary patterns around the world and discuss the health implications of different eating styles (Gen Ed).
  - o Describe the basic principles of food economics, and how they impact production, distribution, and consumption of food around the globe (Gen Ed).
- **Critical Thinking:** Students carefully and logically analyze information from multiple perspectives and develop reasoned solutions to problems within the discipline(s).
  - o 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 (Quest 2).
  - o Evaluate the interconnectedness of food systems and planetary health, and synthesize the meaning of sustainability in the context of a food system (Gen Ed).

• **Communication:** Students communicate knowledge, ideas and reasoning clearly and effectively in written and oral forms appropriate to the discipline(s).

Page 10

o 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 (Quest 2).

o 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 (Gen Ed).

• **Connection:** Students connect course content with meaningful critical reflection on their intellectual, personal, and professional development at UF and beyond.

o Connect course content with critical reflection on their intellectual, personal, and professional development at UF and beyond (Quest 2).

o 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 (Gen Ed).

#### **V. Quest Learning Experiences**

##### 1. Details of Experiential Learning Component

• Visit to UF Farm and Gardens: The Farm and Gardens host a variety of production systems that can be used for experiential learning, classes, tours, and events. From art and history to engineering and agronomy, the space is designed to allow all academic disciplines to explore and experience food systems concepts and sustainable agriculture in practice. Additionally, staff, interns, and volunteers work together to manage the space and provide food for the Alan and Cathy Hitchcock Pantry and local charities, such as GRACE Marketplace and Bread of the

##### **Mighty Food Bank.**

##### 2. Details of Self-Reflection Component

As discussed in the Graded Work section, you will be reflecting on the information presented to you.

There are 10 reflections assignments throughout the semester. These are occasions when you will examine what you think, why you think it, and what are the implications of your thoughts for yourself and for others. In either a video format or document, address these questions:

- What do you think about this situation and why?
- How will you explain to friends or family members the importance of this situation?
- How will you use this information in your future career and personal life?

#### **VI. Required Policies**

#### Attendance Policy

Requirements for class attendance and make-up exams, assignments, and other work in this course are consistent with university policies that can be found at:

<https://catalog.ufl.edu/ugrad/current/regulations/info/attendance.as>

#### Students Requiring Accommodation

Students with disabilities who experience learning barriers and would like to request academic accommodations should connect with the disability Resource Center by visiting

<https://disability.ufl.edu/students/get-started/>. It is important for students to share their

accommodation letter with their instructor and discuss their access needs, as early as possible in the semester.

#### UF Evaluations Process

Students are expected to provide professional and respectful feedback on the quality of instruction in this course by completing course evaluations online via GatorEvals. Guidance on how to give feedback in a professional and respectful manner is available at <https://gatorevals.aa.ufl.edu/students/>. Students will be notified when the evaluation period opens, and can complete evaluations through the email they receive from GatorEvals, in their Canvas course menu under GatorEvals, or

via <https://ufl.bluera.com/ufl/>. Summaries of course evaluation results are available to students at <https://gatorevals.aa.ufl.edu/public-results/>.

#### University Honesty Policy

UF students are bound by The Honor Pledge which states, "We, the members of the University of Florida community, pledge to hold ourselves and our peers to the highest standards of honor and integrity by abiding by the Honor Code. On all work submitted for credit by students 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." The Honor Code

(<https://www.dso.ufl.edu/sccr/process/student-conduct-honor-code/>) specifies a number of behaviors that are in violation of this code and the possible sanctions. Furthermore, you are obligated to report any condition that facilitates academic misconduct to appropriate personnel. If you have any questions or concerns, please consult with the instructor or TAs in this class.

#### Counseling and Wellness Center

Contact information for the Counseling and Wellness Center:

<http://www.counseling.ufl.edu/cwc/Default.aspx> , 392-1575; and the University Police Department: 392-1111 or 9-1-1 for emergencies.

#### The Writing Studio

The writing studio is committed to helping University of Florida students meet their academic and

professional goals by becoming better writers. Visit the writing studio online at

<http://writing.ufl.edu/writing-studio/> or in 2215 Turlington Hall for one-on-one consultations and workshops.