

# IDS 2935: Valuing Circular Food Economies

## Quest 2



Image: [Transforming Food and Agriculture to Circular Systems: A Perspective for 2050](#)

“Circular economies keep products and materials in use, regenerate natural resources, drastically reduce waste and pollution, and increase economic value.”

Jones, J. et.al. (2021)

## I. General Information

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### Class Meetings

- Fall 2023
- MWF Period 7 (1:55 pm – 2:45 pm)
- Location [FLG 0270](#)

### Instructor

- Dr. Jennifer Clark
- 1191 McCarty Hall A (MCCA) and Zoom: <https://ufl.zoom.us/j/7910794490>
- Office hours: Tuesdays & Wednesdays 11:00 am – 12:00 noon; or by appointment
- Preferred email: [tspartin@ufl.edu](mailto:tspartin@ufl.edu) (include AEB 2014 in subject line)

### Teaching Assistant

- Name TBA via Canvas > Announcement after drop/add ends
- Office location TBA
- Office hours TBA
- Contact information TBA

## Course Description

How do we know whether a particular decision is the best one for us (or society) to make? When it comes to decisions about scarce resources, the social science known as agricultural economics provides a foundation for informed policy decisions about natural resources such as water and land use; or decisions regarding produced and manufactured resources such as food and clothing. Agricultural economists use a variety of modeling tools to consider optimal behaviors, including how we can reconsider linear systems of production into circular and regenerative ecosystems, referred to as a circular economy. A Cost-Benefit Analysis (CBA) is one systems-thinking tool we use for evaluating complex projects and simple decisions, to evaluate and model the pros and cons of economic decisions. CBA can be applied across a broad array of disciplines including agronomy, engineering, geography, education, medicine, law, finance, human factors, psychology, and many others. CBA project managers and thinkers in society evaluate expectations about rewards (from a decision or action), and costs (including long-term repercussions), to achieve desired outcomes.

**This course addresses the pressing question, “How can we create and sustain circular food system benefits and evaluate intended and unintended impacts to society from our decisions, to optimize use and conservation efficiency of scarce resources?”** The CBA modeling technique provides a mechanism used in our quest for developing regenerative food systems that can satisfy a growing global population.

Throughout the course, students are invited to explore diverse perspectives contextualized within a circular food-system decision environment. As an economic policy tool, we collect, analyze, and communicate research results, build consensus among diverse groups (when it is natural for conflicts to arise), and work towards formulating equitable solutions. The goal of this course is to develop a data-driven perspective through selected readings and experiential classroom activities; to think about factors relevant to the quest by reflecting on knowledge gained; to communicate findings through concise, focused, and goal-oriented analytical writing assignments; to engage in classroom and online discussions to share diverse considerations; and to create a final CBA portfolio model that allows each student to *tell a story* of their own policy recommendations to design regenerative, resilient, and sustainable circular-food system elements that create value for current and future generations.

## Quest and General Education Credit

- Quest 2
- Social & Behavioral Sciences
- Writing Requirement (WR) 2000 words

*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

The textbook we will reference for this course is: Boardman et.al. (2019). Cost-Benefit Analysis, Fifth Edition, Cambridge University Press. You may use another edition of the textbook; however, I caution you that some material has changed. There will be a copy of the fifth edition on reserve at the UF Marston Science Library. You can reference writing style for the course following The Bedford Handbook for Writers (any edition) by Hacker or Hacker & Sommers (copies are available at the UF Library). Agricultural economics uses APA style following Transue, B. (2019). APA Style 7th edition.

### Additional Readings/Works

1. Jones, J., Verma, B., Basso, B., Mohtar, R., & Matlock, M. (2021). Transforming food and agriculture to circular systems: a perspective for 2050. *Resource Magazine*, 28(2), 7-9. Accessed via: <https://elibrary.asabe.org/abstract.asp?aid=52130> (2 pages).
2. Jaing, W. & Marggraf, R. (2021). The origin of cost-benefit analysis: a comparative view of France and the United States. *Cost Eff Resour Alloc* 19, 74. DOI: <https://doi.org/10.1186/s12962-021-00330-3> (10 pages).
3. do Canto, N. R., Grunert, K. G., & De Barcellos, M. D. (2021). Circular food behaviors: a literature review. *Sustainability*, 13(4), 1872. DOI: <https://doi.org/10.3390/su13041872> (23 pages).
4. Arrow, K., M. et al. Cropper, C. Gollier, B. Groom, G. Heal, R. Newell, W. Nordhaus, R. Pindyck, W. Pizer, P. Portnoy, T. Sterner, R.S.J. Tol, and M. Weitzman; "Determining Benefits and Costs for Future Generations," *Science* 26 July 2013; Vol. 34: 349-350. DOI: <https://doi.org/10.1126/science.1235665> (2 pages).
5. Ellen MacArthur Foundation (2017). *The Circular Economy*. (2,000 words). Accessed via: <https://archive.ellenmacarthurfoundation.org/explore/food-cities-the-circular-economy>
6. Schwartz, B. (2014, Feb 12) *Beware of economics: The perils of cost-benefit analysis*. PBS News Hour, NewsHour Productions LLC. (webpage 1,600 words). Accessed via: <https://www.pbs.org/newshour/nation/beware-economics-perils-cost-benefit-analysis>
7. Plakias, Z. (2021). Cost-benefit analysis as a tool for measuring economic impacts of local food systems: Case study of an institutional sourcing change. *Journal of Agriculture, Food Systems, and Community Development*, 10(3), 161-185. DOI: <https://doi.org/10.5304/jafscd.2021.103.011> (25 pages).
8. Salvador, R. (2021). Accelerating transformation towards a sustainable and circular food system. 2021 Applied Agricultural Economics Association (AAEA) annual meeting, Gordon Rausser Keynote Address, Austin, TX July 15, 2021. Accessed via: <https://www.aaea.org/meetings/2021-aaea-annual-meeting/events/plenary-sessions/gordon-rausser-keynote-address> [Video: 63m].

Materials and Supplies Fees: n/a

## II. Graded Work

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### Description of Graded Work

The table below provides descriptions of all major assignments.

	Description	Points
<b>Discussion [D] &amp; Discussion Response [DR]</b>	Bi-weekly research reflections applying understanding of CBA concepts and critical thinking to a food-related topic of personal interest; includes a prompted response to two student peers (6 x 50 points each). Due in Canvas by 11:59 pm on the due date.	300

<b>Think Pieces [TP] – Experiential Learning</b>	<p>Weekly in-class participative experiential activity demonstrating classroom engagement with readings and media, including evidence of annotated reading notes, active discourse, and submission of self-reflection 3-minute papers responding to activity prompts. (15 x 10 points each - two unexcused absences permitted). Several “fieldtrip” experiences are planned throughout the semester that are optional for students to engage in out of class activities with the instructor and other students. Options may include trips to UF’s Energy Park, UF’s Field to Fork gardens, gardens, and UF’s Student Compost Cooperative, or others. These opportunities are designed to be enjoyable experiences networking and sharing to increase knowledge of work on campus supporting a circular food economy.</p>	<p>150</p>
<b>Writing Activity [WRA]</b>	<p>Bi-weekly concise written communication focused on responding to writing prompts to demonstrate understanding of concepts underlying the development of a CBA project developed over the course of the semester (6 X 125 points each). <b>(400+ words each count towards [WR] for semester total 2,000 words)</b> Due in Canvas by 11:59 pm on the due date. <i>Writing feedback provided before the end of finals week.</i></p>	<p>750</p>
<b>Quiz [Q]</b>	<p>Bi-weekly, 50-minute multiple choice and short-answer open-book/open-notes quizzes reflecting content covered in class lectures, activities, and readings to demonstrate quantitative and qualitative CBA applications that intersect learning objectives associated with other course assignments (6 X 100 points). Due in Canvas by 11:59 pm on the due date.</p>	<p>600</p>
<b>Final CBA Portfolio</b>	<p>End of semester portfolio synthesizing elements of graded works submitted during the semester demonstrating capacity to manage a CBA project topic through 1) integration of concepts and applications discovered through discussions, discussion responses, think pieces, writing activities, and quizzes to 2) tell a visually appealing and descriptive “story” to a diverse audience seeking to understand food-related scarce resource cost and benefit allocations important to society. A design template is provided for this activity for students to expand on and personalize their portfolio story into a professional presentation archived digitally in Canvas. Due in Canvas by 11:59 pm on the due date at the end of the semester.</p>	<p>200</p>
<b>Total Points</b>		<p><b>2000</b></p>

## Grading Scale

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

A	94 – 100%		C	74 – 76%
A-	90 – 93%		C-	70 – 73%
B+	87 – 89%		D+	67 – 69%
B	84 – 86%		D	64 – 66%
B-	80 – 83%		D-	60 – 63%
C+	77 – 79%		E	<60

## Grading Rubric(s)

### Writing Assessment Rubric and Statements

	SATISFACTORY (Y)	UNSATISFACTORY (N)
<b>CONTENT</b>	Papers exhibit at least some evidence of ideas that respond to the topic with complexity, critically evaluating and synthesizing sources, and provide at least an adequate discussion with basic understanding of sources.	Papers either include a central idea(s) that is unclear or off-topic or provide only minimal or inadequate discussion of ideas. Papers may also lack sufficient or appropriate sources.
<b>ORGANIZATION AND COHERENCE</b>	Documents and paragraphs exhibit at least some identifiable structure for topics, including a clear thesis statement but may require readers to work to follow progression of ideas.	Documents and paragraphs lack clearly identifiable organization, may lack any coherent sense of logic in associating and organizing ideas, and may also lack transitions and coherence to guide the reader.
<b>ARGUMENT AND SUPPORT</b>	Documents use persuasive and confident presentation of ideas, strongly supported with evidence. At the weak end of the Satisfactory range, documents may provide only generalized discussion of ideas or may provide adequate discussion but rely on weak support for arguments.	Documents make only weak generalizations, providing little or no support, as in summaries or narratives that fail to provide critical analysis.
<b>STYLE</b>	Documents use a writing style with word choice appropriate to the context, genre, and discipline. Sentences should display complexity and logical sentence structure. At a minimum, documents will display a less precise use of vocabulary and an uneven use of sentence structure or a writing style that occasionally veers away from word choice or tone appropriate to the context, genre, and discipline.	Documents rely on word usage that is inappropriate for the context, genre, or discipline. Sentences may be overly long or short with awkward construction. Documents may also use words incorrectly.
<b>MECHANICS</b>	Papers will feature correct or error-free presentation of ideas. At the weak end of the Satisfactory range, papers may contain some spelling, punctuation, or grammatical errors that remain unobtrusive so they do not muddy the paper's argument or points.	Papers contain so many mechanical or grammatical errors that they impede the reader's understanding or severely undermine the writer's credibility.

- The Writing Requirement (WR) ensures students both maintain their fluency in writing and use writing as a tool to facilitate learning.
- The instructor will evaluate and provide feedback before the end of the course on all of the student's written assignments with respect to grammar, punctuation, clarity, coherence, and organization.
- WR course grades have two components. To receive writing requirement credit, a student must receive a grade of C or higher and a satisfactory completion of the writing component of the course.

## Think Pieces [TP] Experiential Learning Rubric

Experiential Learning is the process of learning by doing. In this course each student will participate in Experiential Learning through Think Pieces [TP] described in the following section.

Think Pieces provide an environment for: 1) pre-work preparation, 2) small group active learning (SMAL), and 3) dedicated time spent post-SMAL activity in reflection to connections between theories presented and application to real-world situations. These three parts (i.e., evidence of in-class preparation, active small-group discussion & activity, a 3-minute reflection paper) are referred to as the Think Pieces [TP] Experiential Learning component of this course. Think Pieces [TP] Experiential Learning components are summarized below.

- 1) **Pre-work preparation** includes taking notes while completing the weekly readings assigned that are due before class begins. Written (not digital) notes from the readings are an important part of academic success in college and will help you to:
  - a. organize ideas and information
  - b. think critically about what you read while you read
  - c. be prepared for class and build a foundation for participation in small groups
  - d. keep a record of what you read so you can more easily locate it in the future
  - e. draw conclusions and identify main ideas
  - f. study for quizzes and prepare content for the Final CBA Portfolio
- 2) **Small group active learning (SMAL)** includes engagement in instructor-curated learning activities designed to construct knowledge, skills, and personal and professional attributes in CBA project management. SMAL encompasses a deep-learning approach to meaningful understanding of critical concepts introduced in class and applies a group setting to motivate social factors relevant to learning. SMAL engages peers to construct meaning from planned activities to form connections between understanding theory and applying concepts to real-world situations.
- 3) **Concise 3-minute reflection paper** provides a learning opportunity for students to deepen metacognitive understanding of CBA concepts and identify gaps in the knowledge and self-confidence to apply CBA principles in their own personal and professional lives.

These [TP] Experiential Learning activities reflect active learning content developed by the instructor, that are based on the weekly readings/media, for introducing class discussion and launching SMAL activities based on weekly concepts. Engagement with the [TP] elements foster deeper learning, social engagement, and individual reflection in preparation for the Final CBA Portfolio capstone project due at the end of the semester.

Rubric	Points
Thorough on-point and substantive engagement and reflection response indicative of preparation with course materials (e.g., annotated notes) active small-group participation, and 3-minute written reflection of time spent during the class period.	Full credit (8-10)

Competent and complete but may lack clarity or focus with class preparation (e.g., annotated notes) or participation in small groups; reflection is cursory, lacking specific detail or connection to CBA concepts covered in class.	Partial credit (5-7)
Incomplete, with no evidence of careful consideration, appears rushed and shows little involvement with the materials.	Marginal credit (1-4)
No submission	No credit 0

### III. Annotated Weekly Schedule

*The schedule is tentative and subject to change. Check Canvas for any updates*

Week	Monday	Wednesday	Friday
Introduction to the Quest of using Cost-Benefit Analysis (CBA) in a Circular and Sustainable Food System and the Science of Economic Decision-Making <i>This Module's lessons will introduce and apply CBA to the discipline of Political Science.</i>			
<b>Topic:</b> Introduction & overview of course expectations <b>Summary:</b> An introduction to the Quest program and what it means to use a systems-based approach to decision making when outcomes are uncertain and resources are scarce (i.e., not unlimited in quantity). Questions inquire into why the world is the way it is and share a perspective of sustainability found in circular food systems that are complex adaptive environments (meaning that our global food systems are interdisciplinary and formed by dynamic network interactions. Ideas explore what we think we can do to integrate waste re-cycle to increase scarce resource efficiency through CBA through discussion. Course expectations and overview of graded assignments will be covered.			
1		8/23 Introduction to the course and in-class discussion	8/25 In class activity and discussion  <b>Reading Due</b> (before class): Transforming food and agriculture to circular systems: a perspective for 2050 - Jones, J., et.al. (2 pages).
Module 1: The Fundamental Theory of Cost-Benefit Analysis (CBA) <i>This Module's lessons will introduce and apply CBA to the discipline of Engineering.</i>			
<b>Topic:</b> The basic concepts and types of CBA <b>Summary:</b> Lecture on studying CBA with an introduction to differentiating individual and social costs and benefits. The steps of CBA are discussed and the in-class activities and reading introduces the importance of considering diverse perspectives in scarce resource allocation and variety of factors influencing the analysis. Through the in-class activities and reading, we will consider CBA principles applied to diverse array of scarce resource decisions and disciplines including case study from different areas and perspectives.			

This Module's lessons will be introduce and apply CBA for circular food systems to the discipline of Engineering.			
2	8/28 In class activity and discussion  <b>Syllabus Quiz Due</b> by 11:59 pm in Canvas	8/30 In class <b>Think Piece #1</b> experiential activity and discussion  <b>[D1 Due]</b> 11:59 pm in Canvas	9/01 In class activity and discussion  <b>Reading Due</b> (before class): Chapter 1 Introduction to Cost-Benefit Analysis - Boardman, et.al. – pp. 1-24.
<p><b>Topic:</b> Applied CBA fundamentals  <b>Summary:</b> An exploration of the historical context underlying the development and use of CBA as a tool for decision making and discovery of the fundamentals used in CBA to determine value. Benefits and costs associated with technological innovations discovered through agricultural revolutions and a selection of economic development projects impacting the natural and built environment in the world around us are presented for consideration including case study from different areas and perspectives.</p>			
3	9/04  Labor Day: No Class	9/06 In class <b>Think Piece #2</b> experiential activity and discussion  <b>[DR1 Due]</b> 11:59 pm in Canvas)	9/08 In class activity and discussion  <b>Reading Due</b> (before class): Chapter 2 Conceptual foundations of Cost-Benefit Analysis - Boardman, et.al. – pp. 28-50.  <b>[Q1 Due]</b> 11:59 pm in Canvas
<p>Module 2: Economic and Valuation Techniques of CBA  <i>This Module's lessons will introduce and apply CBA to the discipline of Medicine.</i></p>			
<p><b>Topic:</b> Conceptual economic foundations of CBA  <b>Summary:</b> Lecture on studying alternatives associated with economic decision making and valuation techniques for assessing efficiency. Social impacts referred to as welfare economics are introduced including concepts of willingness to pay (WTP) and opportunity cost including case study from different areas and perspectives.. Limitations of CBA are discussed including time and monetary constraints.</p>			
4	9/11 In class activity and discussion	9/13 In class <b>Think Piece #3</b> experiential activity and discussion  <b>[WRA 1 Due]</b> 11:59 pm in Canvas	9/15 In class activity and discussion  <b>Reading Due</b> (before class): The origin of cost-benefit analysis: a



			comparative view of France and the United States – Jaing & Margraf (10 pages)
<p><b>Topic:</b> Applied economic foundations of CBA  <b>Summary:</b> Agricultural economists make decisions, “at the margin”, but what does that mean? How can we generalize the Law of Diminishing Returns to any economic decision? For experiential learning, we will utilize in-class time to consider how we may be similar or different in our estimation approaches of value and how we might apply pros and cons rather simply in our day-to-day economic decisions.</p>			
5	9/18 In class activity and discussion	9/20 In class activity and discussion  <b>[D2 Due]</b> 11:59 pm in Canvas	9/22 In class <b>Think Piece #4</b> experiential activity and discussion  <b>Reading Due</b> (before class): Circular food behaviors: a literature review. - do Canto, et.al. (23 pages)
<p><b>Topic:</b> Conceptual valuation methods of CBA  <b>Summary:</b> Lectures introduce a range of direct and indirect economic valuation methods used for CBA, including stated preference and contingent valuation. Activities provide students with an opportunity to calculate value of future and present decisions using case study from different areas and perspectives. when long-range planning is required for a projects involving decisions over multiple time horizons.</p>			
6	9/25 In class activity and discussion	9/27 In class <b>Think Piece #5</b> experiential activity and discussion  <b>[DR2 Due]</b> 11:59 pm in Canvas)	9/29 In class activity and discussion  <b>Reading Due</b> (before class): Chapter 16 Contingent Valuation: Using Surveys to Elicit Information about Costs and Benefits - Boardman, et.al. – pp. 422-452.
<p><b>Topic:</b> Applied valuation methods of CBA  <b>Summary:</b> What do we consider as important for the future of society and how might different generations disagree with our valuation methods? The analysis of different areas and perspectives provide a rich area to consider factors influencing CBA through in-class activities designed to consider how changes in input factors create impacts on the outputs we might receive in the future.</p>			

7	10/02  In class activity and discussion	10/04  In class <b>Think Piece #6</b> experiential activity and discussion  <b>[WRA 2 Due]</b> 11:59 pm in Canvas	10/06  Homecoming: No class
<b>Module 3: Systems-Thinking for CBA</b> <i>This Module's lessons will introduce and apply CBA to the discipline of Law.</i>			
<b>Topic:</b> Conceptual and applied systems-thinking methodology for food systems CBA <b>Summary:</b> We will consider the diversity of systems necessary for developing an individual CBA project relating food-related scarce resources believed to be important for society to consider. Students will collaborate in small groups to develop cost benefit considerations and share feedback with others. Then, what is learned in small groups is shared with the entire class. This week provides students with dedicated time to engage with their ideas for a CBA project and to receive peer feedback and instructor mentorship to form a strong thesis statement.			
8	10/09  In class activity and discussion  <b>Reading Due</b> (before class): Determining Benefits and Costs for Future Generations – Arrow, et.al. (2 pages)	10/11  In class <b>Think Piece #7</b> experiential activity and discussion  <b>[D3 Due]</b> 11:59 pm in Canvas	10/13  In class activity and discussion  <b>Reading Due</b> (before class): The Circular Economy – Ellen MacArthur Foundation (webpage 2,000 words)  <b>[Q2 Due]</b> 11:59 pm in Canvas
<b>Topic:</b> Conceptual impacts in output, input & secondary market food supply chains <b>Summary:</b> Our current economy is based a linear system of production, use, and disposal for food related scarce resources. How do we consider different perspectives for re-use cycles associated with output, input & secondary markets in circular systems? What factors do we include in our analysis and how do we consider value in society for different economies?			
9	10/16  In class activity and discussion	10/18  In class <b>Think Piece #8</b> experiential activity and discussion  <b>[DR3 Due]</b> 11:59 pm in Canvas)	10/20  <b>Reading Due</b> (before class): Chapter 5, Valuing Impacts in Output Markets, pp. 119-124; Chapter 6 Valuing Impacts in Input Markets, pp. 143-147; Chapter 7 Valuing Impacts in Secondary Markets,

			Boardman, et.al. – pp. 162-168.
<p><b>Topic:</b> Applied impacts in output, input &amp; secondary market food supply chains  <b>Summary:</b> Now that we've identified direct and indirect costs impacting the food system, how can we apply CBA concepts to products we buy and food we eat in a circular economy? True food costs, quite often, are not evenly distributed among members of society, so how can valuing impacts from case study along the supply chain help us realize these disparities? Thinking about costs to society in integrated food markets helps us to consider new innovations that can be introduced to re-cycle and allocate resources more efficiently.</p>			
10	10/23  In class activity and discussion	10/25  In class <b>Think Piece #9</b> experiential activity and discussion  [WRA 3 Due] 11:59 pm in Canvas	10/27  In class activity and discussion  <b>Reading Due</b> (before class): Beware of economics: The perils of cost-benefit analysis – Schwartz (webpage 1,600 words)  [Q3 Due] 11:59 pm in Canvas
<p>Module 4: Quantifying CBA Unknowns  <i>This Module's lessons will introduce and apply CBA to the discipline of Liberal Arts.</i></p>			
<p><b>Topic:</b> Conceptual topics in differentiating uncertainty and risk  <b>Summary:</b> How are risk and uncertainty different and what differences are there that influence the decision-making steps used to consider systems-level value? The concept of average probabilities, known as expectations, is introduced as information value we can add to our model of CBA potential outcomes. We use expectations to model probability in sensitivity analyses that incorporate forecasting outcomes important to decision making models.</p>			
11	10/30  In class activity and discussion	11/01  In class <b>Think Piece #10</b> experiential activity and discussion  [D4 Due] 11:59 pm in Canvas	11/03  In class activity and discussion  <b>Reading Due</b> (before class): Chapter 11 Dealing with Uncertainty: Expected Values, Sensitivity Analysis, and the Value of Information - Boardman, et.al. – pp. 269-298.

			[WRA 4 Due] 11:59 pm in Canvas
<p><b>Topic:</b> Applications of uncertainty and risk  <b>Summary:</b> Now that we've introduced the risk model as a mathematical representation of a system incorporating probability distributions, we use relevant historical data and subjective feedback to understand the probability and severity of a risk event. In this section we discuss different case studies demonstrating how average probabilities (i.e., expected values) are valuable to inform policy decisions and identify sources of changes in sustainability issues affecting circular systems.</p>			
12	11/06  In class activity and discussion	11/08  In class <b>Think Piece #11</b> experiential activity and discussion  [DR4 Due] 11:59 pm in Canvas)	11/10  Veterans Day: No Class
<p>Module 5: Developing CBA Tools for Analysis  <i>This Module's lessons will introduce and apply CBA to the discipline of Geography.</i></p>			
<p><b>Topic:</b> Conceptual components of risk management tools  <b>Summary:</b> Strategic risk-related decisions benefit from tools such as forecasting, simulation, and signal detection measures incorporating probabilities. In this section we use a case-study approach to analyze risk management tools and data for a local food system that helps us consider direct and indirect factors relevant to the development of a policy recommendation.</p>			
13	11/13  In class activity and discussion  [Q4 Due] 11:59 pm in Canvas	11/15  In class <b>Think Piece #12</b> experiential activity and discussion  [D5 Due] 11:59 pm in Canvas	11/17  In class activity and discussion  <b>Reading Due</b> (before class): Cost-benefit analysis as a tool for measuring economic impacts of local food systems: Case study of an institutional sourcing change, - Plakias pp. 161-176 [16 pages] – <i>only read up to Table 1. Known Values for Simulation (from Observed Data)</i>

			[WRA 5 Due] 11:59 pm in Canvas
<p><b>Topic:</b> Applications of risk management tools</p> <p><b>Summary:</b> Synthesizing the basics circular food systems, evaluation techniques associated with CBA, and development considerations for risk management tools, serves as a launching point for sharing what is being applied to a complex array of circular food system issues. By building simple decision models, identifying relevant factors as risk-management indicators, and constructing and communicating a thoughtful policy recommendation, students who are new to economic decision making can deepen their understanding of CBA and gain confidence in new areas, apply concepts to new issues, and offer innovative policy solutions.</p>			
14	<p>11/20</p> <p>In class <b>Think Piece #13</b> experiential activity and discussion</p> <p><b>Reading Due</b> (before class Cost-benefit analysis as a tool for measuring economic impacts of local food systems: Case study of an institutional sourcing change, - Plakias pp. 177-180 [4 pages] – <i>only read up to Policy Implications and Suggestions for Future Research.</i></p> <p><b>[DR5 Due]</b> 11:59 pm in Canvas)</p>	<p>11/22</p> <p>Thanksgiving: No Class</p>	<p>11/24</p> <p>Thanksgiving: No Class</p>
<p>Module 6: Communicating CBA Results</p> <p><i>This Module's lessons will introduce and apply CBA to the discipline of Communication.</i></p>			
<p><b>Topic:</b> CBA portfolio presentation &amp; Peer feedback</p> <p><b>Summary:</b> The final CBA portfolio presentations are shared in class and online demonstrating broad understanding of identifying direct and indirect benefits and costs associated with modeling circular and sustainable food systems through concepts and applications learned during the semester.</p>			

15	<p>11/27</p> <p>In class activity and discussion</p> <p><b>Reading Due</b> (before class Cost-benefit analysis as a tool for measuring economic impacts of local food systems: Case study of an institutional sourcing change, - Plakias pp. 180-181 [2 pages] – finish the reading.</p> <p><b>[Q5 Due]</b> 11:59 pm in Canvas</p>	<p>11/29</p> <p>In class <b>Think Piece #14</b> experiential activity and discussion</p> <p><b>[D6 Due]</b> 11:59 pm in Canvas</p>	<p>12/01</p> <p>In class activity and discussion</p> <p><b>Watch video</b> (before class): Accelerating transformation towards a sustainable and circular food system – Salvador [63 minutes]</p> <p><b>[DR6 Due]</b> 11:59 pm in Canvas)</p>
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**Topic:** Final reflection & make-up work  
**Summary:** The last section in the semester provides dedicated time for personal and academic reflection through course discussion, an in-class experiential wrap-up activity, and time provided for make-up assignments that may have been missed during the semester. Any make-up provisions must be discussed with the instructor prior to the last week of classes.

16	<p>12/04</p> <p>In class activity and discussion</p> <p><b>[Q6 Due]</b> 11:59 pm in Canvas</p>	<p>12/06</p> <p>In class <b>Think Piece #15</b> experiential activity and discussion</p> <p><b>[WRA 6 Due]</b> 11:59 pm in Canvas</p> <p><b>[Final CBA Portfolio Due]</b> 11:59 pm in Canvas – however, may submit up to the last day of class with no penalty if email sent to instructor communicating intention before the Due Date.</p>	
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## IV. Student Learning Outcomes (SLOs)

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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).*

- Identify, describe, and explain key themes, principles, and terminology of Cost-Benefit Analysis (CBA) including the history, theory, and methodologies used for CBA-based decision making through discussions, think piece reflections, in-class and individual writing activities, and quizzes that culminate in a final CBA portfolio. (S)
- Recognize, synthesize, and explain the theoretical and empirical issues related to the creation of a circular and sustained food system using multi-disciplinary perspectives and scientific data to guide CBA-based scarce resource allocation decisions through discussions, think piece reflections, in-class and individual writing activities, and a final CBA portfolio. (Q2)

**Critical Thinking:** *Students carefully and logically analyze information from multiple perspectives and develop reasoned solutions to problems within the discipline(s).*

- Apply formal and informal qualitative or quantitative analysis using CBA concepts and methods to examine the models and tools that form the processes by which individuals make personal and group decisions through discussions, think piece reflections, in-class and individual writing activities, and quizzes that culminate in a final CBA portfolio. (S)
- Assess and analyze diverse perspectives in sustainable and circular food systems affected by individual and societal decisions through discussions, think piece reflections, in-class and individual writing activities, and final CBA portfolio. (S)
- Critically analyze and evaluate quantitative data for informing a CBA approach to sustainable and circular food system policy as food-related resources continue evolving to become more resilient and create value for future generations through discussions, think piece reflections, and quizzes. (Q2)

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

- Develop and present clear and effective oral and written work that demonstrates critical engagement with course texts, videos, and experiential learning activities through discussions, think piece reflections, in-class writing activities, and a final CBA portfolio. (S)
- Analyze and reflect on the ways the student and society have considered value in the cost-benefit policy considerations and implications for scarce resources allocated for creating and maintaining healthy and sustainable food systems for members of society through discussion responses, think piece reflections, in-class and individual writing activities, and final CBA portfolio. (Q2)

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

- Connect course content with their intellectual, personal, and professional lives at UF and beyond. (Q2)

- Reflect on their own and others' experience in allocation decisions following economic principles of cost benefit analysis to develop a final CBA Portfolio project. (Q2)

## V. Quest Learning Experiences

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### 1. Details of Experiential Learning Component

For experiential learning opportunities, students will select a food-related topic of personal interest to research during the semester that will culminate in a digitally-archived final CBA project. Students' selected food-related topic can be applied to any number of academic disciplines for which the student has a personal interest. Students will engage in a variety of research, communication, feedback, and reflection assignments designed to build upon course concepts and to provide a systems-based approach to learning CBA techniques, methods, and models. Feedback shared with others is designed to offer guided critique through peer review to increase ability to persevere through answering difficult questions that do not have easy answers, including decisions about scarce resource allocations to develop and sustain circular food systems for a growing global population. The final CBA project is intended to showcase students' abilities and professionally communicate what they've learned about CBA applied to circular food systems as evidence of [employability skills in agriculture and natural resources](#) as identified by the Association of Public Land-Grant Universities (APLU).

### 2. Details of Self-Reflection Component

Self-reflection is built into many of the in-class assignments, think pieces, writing assignments, and the final portfolio project.

## VI. Required Policies

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### 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.aspx>

### 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/>, 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.

## **In-Class Recordings**

Students are allowed to record video or audio of class lectures. However, the purposes for which these recordings may be used are strictly controlled. The only allowable purposes are (1) for personal educational use, (2) in connection with a complaint to the university, or (3) as evidence in, or in preparation for, a criminal or civil proceeding. All other purposes are prohibited. Specifically, students may not publish recorded lectures without the written consent of the instructor.

A “class lecture” is an educational presentation intended to inform or teach enrolled students about a particular subject, including any instructor-led discussions that form part of the presentation, and delivered by any instructor hired or appointed by the University, or by a guest instructor, as part of a University of Florida course. A class lecture does not include lab sessions, student presentations, clinical presentations such as patient history, academic exercises involving solely student participation,

assessments (quizzes, tests, exams), field trips, private conversations between students in the class or between a student and the faculty or lecturer during a class session.

Publication without permission of the instructor is prohibited. To “publish” means to share, transmit, circulate, distribute, or provide access to a recording, regardless of format or medium, to another person (or persons), including but not limited to another student within the same class section. Additionally, a recording, or transcript of a recording, is considered published if it is posted on or uploaded to, in whole or in part, any media platform, including but not limited to social media, book, magazine, newspaper, leaflet, or third party note/tutoring services. A student who publishes a recording without written consent may be subject to a civil cause of action instituted by a person injured by the publication and/or discipline under UF Regulation 4.040 Student Honor Code and Student Conduct Code.