

Intro to Design Thinking Course Syllabus

Design Thinking teaches methods and practices for site observation, considerations for creative techniques for project development and various potentials of design related to food systems. Individuals will be equipped with new knowledge and tools for participating in design-based projects and understand the importance of design as it relates to project development in food systems.

Assistance Contacts

Curriculum Assistance: For questions regarding content in workshops and Moodle, please contact Bre Miller.

Bre Miller
millerb@iastate.edu
515-291-8004

Technical Assistance: For questions regarding technology used to support coursework, please see contacts below.

Moodle (username and password)	kaleyh@iastate.edu 515-745-2401 ei hotline@iastate.edu 515-249-1725
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Part 1: Course Information

Course Description

Participants in this course will receive access to CFS Module 1: Introduction to Community Food Systems and Design Thinking. Introduction to Community Food Systems teaches the Community Food Systems process utilized at Iowa State University. Design Thinking teaches methods and practices for site observation, considerations for creative techniques for project development and various potentials of design related to food systems.

Course Learning Outcomes

- Participants will understand the need for design as it relates to food systems processes and projects, and where to engage with designers in the community food systems process. Participants will learn observation techniques for site development as an intermediate stage for concept design and strategy development.
- Participants will understand different ways of listening and observation as it relates to site or product design, including the function of space and identity in community design projects. In addition, they will learn ways of partnering with additional organizations and businesses as it relates to technical assistance needed for design.

Part 2: Course Methods and Delivery

Technical Requirements

- Internet connection (DSL, LAN, or cable connection desirable)
- Moodle
- Adobe Flash Player
- Adobe Acrobat Reader
- Audio out and in

If you need technical assistance at any time during the course, or to report a problem with Moodle, please email kaleyh@iastate.edu. See **Assistance Contacts** on page 1 for further technical assistance contacts.

Part 3: Course Requirements and Grading

You must achieve an overall course grade of 80 in percent in Moodle to receive a Mapping 101 Certificate of Completion.

Completing Assignments

All assignments for the online modules will be submitted electronically through Moodle unless otherwise instructed. Assignments that are too large to be submitted in Moodle must be submitted to instructor via email.

Activity and assignment details will be explained in detail within each learning module in Moodle. If you have any questions regarding activities, please email millerb@iastate.edu.

Moodle Grading Rubric

- A grading rubric is used by instructors to grade assignments submitted in Moodle. It is recommended for students to review the rubric prior to completing assignments to meet requirements.

- If you do not receive a grade above 80 percent for an assignment, the grader will provide comments for edits and you will have the opportunity to resubmit the assignment for a higher grade (reminder: an *overall* course grade of 80 percent is required to receive a certificate).

The grading rubric assigns a grading category to each assignment: reflection, application, critical thinking, and creation. Based on that assignment's category, review the associated rubric to understand grading requirements. If two categories are listed, the assignment will be graded based on both categories' criteria and averaged for an overall score.

Assignment Categories

Economic Impact	Category
1.2 Activity 1	Reflection and Application
1.3 Activity 2	Reflection
2.3 Activity 1	Application and Creation
2.5 Activity 2	Creation

Grading Rubrics

Reflection

100%	90%	80%	Revisions Required > 80%
Thoughtful and significant response to how the question relates to personal and or professional life with meaningful examples, shows interconnectedness between work and course or lived experience, answers all components of reflection question	Thoughtful and adequate response to how the question relates to personal and or professional life, answers all components of reflection question	Limited reflection, provides satisfactory information	Unsatisfactory, insignificant response, limited to no thoughtful feedback, doesn't answer all components of reflection question

Application

100%	90%	80%	Revisions Required > 80%
Significant analysis regarding readings or presentation to their place-based programs and projects, strong examples and acknowledgement related to personal work.	Proficient analysis of readings and presentations that relate to their place-based programs and projects.	Adequate analysis but lacking strong connections to personal and place-based work.	Unsatisfactory and insignificant connections to personal and place-based work.

Critical Thinking

100%	90%	80%	Revisions Required >80%
Significant and effective reflection that demonstrates ability of the student to question their own preconceptions, and/or assumptions and define new modes of thinking as a result and consider alternate perspectives.	Adequate reflection that demonstrates ability of the student to question their own preconceptions, and/or assumptions and define new modes of thinking as a result and consider alternate perspectives.	Limited consideration of their own preconceptions, and/or assumptions and define new modes of thinking as a result and consider alternate perspectives.	Unsatisfactory, insignificant consideration of their own preconceptions, and/or assumptions and define new modes of thinking as a result and consider alternate perspectives.

Creation

100%	90%	80%	Revisions Required >80%
Strong ability to create a desired product that reflects their personal and place-based efforts through critical thinking from workshops, presentations, and readings.	Considerable ability to create desired products relating place-based work that details full understanding of assignment objectives.	Acceptable ability to create desired products relating to place-based work but lacks detail relating to assignment objectives.	Unsatisfactory and insignificant ability to create desired products relating to place-based work.

Tests

There is a pre- and post-test for Module 1, which is submitted electronically through Moodle. You must pass the post-test with an 80 percent to move on to the next module.

Important Note: Test questions are based on all Required Activities, including presentations, videos and readings in the module.

Viewing Grades in Moodle

- Click into the course
- Click on the Grades link in the Settings Box to the right of the main course page

Part 4: Course Outline

Module: Intro to Design Thinking

Module Goal: Individuals will be equipped with new knowledge and tools for participating in design-based projects. They will understand the importance of design as it relates to project development in food systems.

Introductory Presentation:

Sue Beckwith: Designing the Local Food Center

Basics of Design Thinking

Overview: This section will provide an overview of the importance of design as it relates to the Community Food Systems program. It will utilize examples from the program and showcase the importance of place-based development and collaboration with design methods.

Outcomes: Participants will understand the need for design as it relates to food systems processes and projects, and where to engage with designers in the community food systems process. Participants will learn observation techniques for site development as an intermediate stage for concept design and strategy development.

Required Activities:

1.1 Presentation 1: Design Thinking

1.2 Activity 1: Consider current projects you are involved with that may need additional design support. Write down potential organizations that would be appropriate to assist in those pieces of the project.

1.3 Activity 2: Download the Video Observation Activity worksheet. Next, go to the AgMrc website featuring [Value Added Producer Grant Recipients](#) and choose one to watch. Respond to the questions on the activity sheet based on your observation.

1.4 Reading 1: Design Thinking

Design Development

Overview: This section will walkthrough one community and discuss different design strategies for project development.

Outcomes: Participants will understand different ways of listening and observation as it relates to site or product design, including the function of space and identity in community design projects. In addition, they will learn ways of partnering with additional organizations and businesses as it relates to technical assistance needed for design.

Required Activities:

2.1 Presentation 1: Design Development

2.2 Reading 1: 5 Stages in the Design Thinking Process

2.3 Activity 1: Interviews and site visits are used to understand context such as environmental conditions, infrastructure, community layout, etc. for a project. For this activity, you will conduct an interview and site visit with a food business or food project in your community. First, review the Site Visit and Site Observation Example below; this guide was used to determine appropriate strategies for businesses adding processing elements to their existing business. Additionally, read the [Scaling Specialty Crop Processing](#) document to understand how site visits can inform research and projects. After reviewing both documents, select a site in your community to conduct an interview and site visit.

In 2.5 Activity 2, you will use the same site to build upon your findings and develop a concept design.

Based on your selected location, create your own interview questions and site observation guide using the Design Concept Interview Template below. Briefly describe the project, the problem you are hoping to address and any additional observations or notes that will be important in your concept design.

2.4 Presentation 2: Master Plan Design

2.5 Activity 2: Now that you have learned about the importance and use of concept diagrams and master plans, you will build upon your findings from 2.3 Activity 1 to develop a concept design for your selected site. In addition to your interview and site visit findings, consider various aspects of the site like accessibility, use of materials, conditions on site, etc. to inform your master plan and brainstorm potential improvements. Using materials that are available to you (Adobe design software, paper and pen, QGIS, etc.) develop a concept design, including a brief narrative describing your concept.

Design Thinking Evaluation