

Mapping 101 Course Syllabus

Mapping and visual aids helpful tools to express concerns or opportunities for new projects or existing issues within businesses and organizations. The Iowa State University Mapping 101 course offers both a step by step process to develop place-based maps for analysis and reports, as well as tools that are available to enhance a business feasibility study or proposal.

Assistance Contacts:

Curriculum Assistance: For questions regarding curriculum and Moodle technical assistance, please contact Kaley Hohenshell.

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

Moodle (username and password)	Email: kaleyh@iastate.edu Email: ei hotline@iastate.edu Phone: 515-249-1725
QGIS	Email: kaleyh@iastate.edu Toolkit: QGIS workbook

Part 1: Course Information:

Course Description

Participation in this program will lead to new skills in mapping techniques, unique input models to garner feedback, comprehensive reports utilizing qualitative and quantitative information, and resources to find necessary data for decision making on multiple scales from business development, organizational work and community food systems assessments.

Course Learning Outcomes

- Participants will understand the use of maps and illustrations as it relates to garnering feedback from business constituents or community members as a tool for decision making
- Participants will learn techniques to create maps through GIS/QGIS/ and illustrations through Adobe programs that will enhance ability to showcase current conditions and needs for businesses, organizations, and community development
- Participants will learn how to compile maps and feedback into an assessment to share with constituents

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 audio 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** above for further technical assistance contacts.

Part 3: Course Requirements and Grading

You must achieve an overall course grade of 80 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.

Important Note: Activity and assignment details will be explained in detail within each learning module in Moodle. If you have any questions, please email kaleyh@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

Assignment	Category
1.7 Activity 1	Reflection and Critical Thinking
2.8 Activity 1	Creation
2.10 Activity 2	Creation
2.12 Activity 3	Critical Thinking and Creation
3.2 Activity 1	Creation
3.3 Activity 2	Critical Thinking and 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.

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 5: Course Outline

Module 1: Mapping for Food Systems

Overview: This section will provide an overview of the need for mapping and how they can be used for decision making.

Outcomes: Participants will have increased understanding of the importance of mapping and appropriate ways to utilize both visualizations and assessments within business development, organizational pursuits, and community foods systems.

Required Activities:

- [1.1 Presentation 1: Introduction to Mapping](#)
- [1.2 Reading 1: Local Food Economics—Framing Your Assessment Process](#)
- [1.3 Reading 2: Local Food Economics—Using Secondary Data](#)
- [1.4 Reading 3: Finding Quick Stats](#)
- [1.5 Reading 4: Local Food Economics—Primary Data](#)
- [1.6 Reading 5: Local Food Economics—Engaging Community Process with Data](#)
- [1.7 Activity 1](#)

Module 2: Creating a Map

Overview: This section will provide an overview of the basics of GIS, the QGIS open source software, and common publicly available GIS datasets that can be used for food systems mapping.

Outcomes: Participants will know what GIS is, how it can be used in the food systems context, and will be able to create a map with the QGIS opensource software. Participants will also know new sources for finding relevant data.

Required Activities:

- [2.1 Reading 1: Terms and Definitions](#)
- [2.2 Presentation 1: What is GIS?](#)

[Download the Essentials of QGIS Workbook before proceeding with activities and presentations. It may be helpful to have the workbook open in a different window, second screen or printed while installing QGIS software and downloading the CFS Data Package.](#)

- [2.3 Presentation 2: Interface Navigation](#)
- [2.4 Presentation 3: Accessing and Working with GIS Data](#)
- [2.5 Presentation 4: Styling Layers](#)
- [2.6 Presentation 5: Adding Labels](#)
- [2.7 Presentation 6: Map Layout and Exporting Maps](#)
- [2.8 Activity 1](#)
- [2.9 Presentation 7: Creating New Data Layers](#)
- [2.10 Activity 2](#)
- [2.11 Presentation 8: Analysis and Assessment](#)
- [2.12 Activity 3](#)

Module 3: Creating the Report

Overview: This section will describe the process of taking a GIS map and making it into an analysis report. It will review a project design, as well as share templates for layouts.

Outcomes: Participants will create their own place-based map based on their reflections in section 1. Participants will develop a report and will receive feedback and critique from Mapping 101 teachers.

Required Activities:

[3.1 Presentation 1: Building Your Map](#)

[3.2 Activity 1](#)

[3.3 Activity 2](#)

[Mapping 101 Evaluation](#)

