



Food, Land & People (FLP 1 & FLP 2 Capstone)
Utah State Office of Education Virtual Workshop and
Utah State University Online Course
Course Homepage: <https://utah.agclassroom.org>



Online Course Instructors:

Elementary Teachers (K-6)

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Description and Expected Course Outcomes

The Food, Land & People (FLP) course has been developed to increase elementary and secondary teacher/student knowledge about agriculture (farm to fork) and the environment using research-based teaching strategies while meeting statewide mandatory core curriculum standards in the areas of science, social studies, geography, nutrition, and career and technical education. Enrollees must be practicing teachers or engaged in an informal teaching situation as the course requirements require teaching and interacting with students.

Teachers will be able to use the numerous classroom resources including lesson plans, kits, bulletin boards, DVDs/videos, books, software, maps, and PowerPoint presentations on the Utah Agriculture in the Classroom website to meet course requirements. In addition to meeting state core curriculum guidelines, the resources have been designed to promote environmental awareness, critical thinking, problem-solving skills, cooperative attitudes, and an appreciation for cultural differences. Meaningful activities and well-defined learning outcomes enhance teaching skills, instructional strategies, and content knowledge concerning science, technology and society as these subjects relate to food, land, and people.

Upon completion of this course, students will be able to:

- ◆ Demonstrate several instructional strategies including hands-on inquiry methods.
- ◆ Identify scientific advances that have changed cultures and societies.
- ◆ Discuss how content in science, social studies, geography, nutrition, and career and technical education is applied to real-world issues concerning food, land, and people and use evidence, inferences, and claims related to food, clothing and shelter (agriculture) to educate students about agricultural issues.

Credit Options: Food Land & People

1. Food, Land & People (FLP 1): Utah State Office of Education Credit (USOE I — CACTUS, Pass/Fail)
2. Food, Land & People (FLP 1): Utah State University Credit (TEAL 5560, Pass/Fail)
3. Food, Land & People (FLP 1): Utah State University Credit (ASTE 6400, Graded, same fee for in and out-of-state)
4. Capstone - Food, Land & People (FLP 2): USOE II Pass/Fail (Prerequisite: TEAL 5560 or ASTE 6400)
5. Capstone - Food, Land & People (FLP 2): Utah State University Pass/Fail Credit (TEAL 5560 - Prerequisite: USOE I or ASTE 6400)
6. Capstone - Food, Land & People (FLP 2): Utah State University Graded Credit (ASTE 6400 - Prerequisite: USOE I or TEAL 5560)
7. Food, Land & People (FLP 1): Utah State University Credit (TEAL 5560, Pass/Fail, Out-of-State)

The Food, Land & People (FLP) course is an asynchronous, independent study (yearlong course); enrollees may take up to one year to complete course requirements. **Capstone course enrollees (FLP 2)** are expected to read different articles, submit different projects, and teach different lessons from what was submitted in the prerequisite Food, Land & People course.

Online Course Fees

Teachers determine the number of semester credits they would like to earn, 1-3 credits.

Semester Credit(s)	USOE CACTUS (Pass/Fail)	USU-TEAL 5560 Utah Teachers (Pass/Fail)	USU-ASTE 6400 (Graded Credit)	USU-TEAL 5560 Out-of-state (Pass/Fail)
1 (USOE 14 hours)	\$25	\$60	\$314	\$130
2 (USOE 28 hours)	\$50	\$90	\$628	\$160
3 (USOE 42 hours)	\$75	\$120	\$942	\$190

How to Register

Register online by going to <https://utah.agclassroom.org/teachercenter>, and clicking on the “Online Course” tab. Select the course you would like to enroll in and then follow the online instructions for payment. Once you are enrolled, make sure your browser is up-to-date and that your pop-up blocker is turned off.

Course Requirements

Credits earned are determined by: 1) the number of completed projects, 2) the number of completed reading & podcast reflections, 3) the number of hours spent in classroom instruction, instructional hours, using the course approved materials and 4) the completion of the final strategy reflection.

The requirements for credit(s) are as follows:

Credit(s)	Project Reflections	Reading & Podcast Reflections	Instructional Hour Reflections	Final Strategy Reflection
1	2	3	Minimum of 5 hours*	Required
2	3	4	Minimum of 10 hours*	Required
3	4	5	Minimum of 15 hours*	Required

**Hours of instruction need to be distinct hours of instruction. For example, one lesson that takes one hour to teach cannot be taught five times to meet five hours of instruction. Some lessons may be taught for more than one hour. If one lesson takes three hours to complete, that lesson (taught once) counts for three hours.*

Projects

Food, Land & People (FLP 1)

Required FLP Project 1: Introduce yourself to your instructor, include your name, some basic demographics about the school where you teach, grade level or courses you teach, your favorite teaching strategy, and what you love and don't love about teaching. Do not forget to attach a picture of yourself (JPG file).

Required FLP Project 2: You are going to be using the word "agriculture" in this course, a word that means "farming" and links daily to our quality of life. Follow the instructions for defining agriculture with your students. Attach at least three pictures of your activity (JPG file).

Capstone - Food, Land & People (FLP 2, Course for teachers who have previously completed FLP 1)

Required Capstone Project 1: Introduce yourself to your instructor, include your name, some basic demographics about the school where you teach, grade level or courses you teach, your favorite teaching strategy, and what you love and don't love about teaching. Do not forget to attach a picture of yourself (JPG file).

Required Capstone Project 2: (counts as 2 projects) Complete a 3-hour externship with an agricultural professional in your local area. Document your experience with a farmer, rancher, landscaper, agricultural scientist, agribusinessness, manager, etc. If you need suggestions for your externship, contact your instructor. Document your experience using the project reflection.

Additional Projects: Select from the projects below to complete your credit requirements. Some projects may count as two projects. If you are enrolled in the Capstone course, please complete projects that are different from what you did to complete the FLP 1 course.

- ◆ **Guest Speaker:** Invite a guest speaker to visit your class and report how this presentation enhanced course curriculum.
- ◆ **Website Review:** Identify a website related to the course lesson plans and/or classroom activities, and explain their usefulness for other teachers.
- ◆ **Bulletin Board:** Design a course-related bulletin board to display in your classroom. Submit a JPG image and a description of the display.
- ◆ **Video/DVD Review:** Review a video/DVD listed on the Utah Agriculture in the Classroom [e-Store Website](#). Complete the **Project Report Reflection** explaining how this video/DVD may enhance classroom instruction. If you show it to your students, please comment on their reactions.
- ◆ **WebQuest:** Develop a WebQuest for your students (minimum of 10 questions) and submit a copy of the WebQuest, complete with URLs or submit the URL where the WebQuest can be viewed. To learn more about WebQuests, visit <http://www.wikipedia.org/wiki/WebQuest>.
- ◆ **Technology Tool Enhancement:** Using a technology Web 2.0 tool such as PowerPoint, twitter, VoiceThread, Poll Everywhere, develop a resource to enhance classroom instruction with one of the lesson plans you plan to submit for "Instructional Hours." To learn more about Web 2.0 tools to use in the classroom visit <http://www.go2web20.net/>.
- ◆ **Short Video:** Create a short video (2-5 minutes) for your classroom instruction that could be uploaded as a YouTube movie or posted as a podcast.
- ◆ **Field Trip:** Plan, develop a lesson plan with pre- or post-assessments, and conduct a classroom field trip that promotes agricultural literacy and is congruent with the purposes of the Food, Land & People Course (e.g. dairy farm, grocery store, farm, farm field day, agricultural production factory, etc.). Please have your field trip approved by the course instructor prior to beginning. A minimum of three JPG images to document the activity must accompany the **Project Reflection**.

- ◆ **Farm Field Day Event:** Attend a Farm Field Day Event with your class (find a field day near you, <http://utah.agclassroom.org/htm/literacy>). Assess what your students know about farming and agriculture before and after the event. Submit your assessment results.
- ◆ **AgQuest 20 Questions:** Obtain a free set of [AgQuest](#) cards from your course instructor and present at least one question-a-day to your students for one month. In your Project Report discuss what you and your students learned.
- ◆ **Attend a half-day or after school workshop (counts as one project):** Join us for an afterschool science, social studies, or nutrition workshop for hands-on learning.
- ◆ **Attend a Summer Food, Land & People Workshop (counts as two projects):** This one-day workshop is scheduled annually and involves a full day of traveling workshops and hands-on learning sessions.
- ◆ **Service-learning Project (Requires pre-approval, counts as two projects):** Develop a project that provides students with an opportunity to provide a service and learn at the same time. Ideas include gardening services for the school or local nursing home, composting at the school and then donating the product, etc. This project should extend beyond the classroom and into the community. The activity needs to be congruent with the purposes of the Food, Land & People course. Please have your project approved by the course instructor prior to beginning. A minimum of three JPG images to document the activity must accompany the **Project Report Reflection**.
- ◆ **Embryology Event (counts as two projects):** Hatch chicks in your classroom and provide instruction on the lifecycles of animals, needs of living organisms, or embryo development. (The course instructor can help you obtain fertile eggs and other classroom resources.) Any instruction related to this project may be counted as **Classroom Instruction** hours. A minimum of three JPG images to document the event must accompany the project reflection.
- ◆ **School Garden (counts as two projects):** Develop an indoor or outdoor school gardening project to teach plants, water, lifecycles, soils, weather, nutrition, simple machines, native plants, heredity, microorganisms. This is quite an undertaking, so the development of the garden is the project and all of the instruction done to use the garden resource should be counted as **Classroom Instruction** hours. A minimum of five JPG images to document the project must accompany the **Project Reflection**.
- ◆ **Approved Special Project (Requires pre-approval):** If you have an idea for a project not listed here, email your idea to your course instructor for pre-approval. Project ideas need to be related to the course content and involve two-four hours of effort.

Selected Reading & Podcast Reflections

From the Readings & Podcasts list on the course homepage, select articles (3-5 depending on your credit requirements) that interest you and submit your comments using the **Reading and Podcast Reflection** link on the course homepage. For each article, include a thorough analysis of how the information could be included in a lesson plan from the course. Comments may also include opinions and concerns, and suggested solutions to the problems presented in the reading. Each reflection should be brief— a few paragraphs in length.

Classroom Instruction Reflection

To complete your classroom instructional hour reflections, you may use lesson plans and resources from the following:

1. [Teacher Resources](#) on our website, YOU MUST ADD THE LESSONS YOU PLAN TO TEACH TO YOUR LIBRARY so that the titles show up in the drop-down box on the “Instructional Hour Reflections” page link.
2. [Approved list of copyrighted lesson plans](#) (that you may own or purchase, we don’t have the rights to post these online) see page 6.
3. A [pre-approved lesson](#) plan that you would like to develop and implement to meet the course requirements and that addresses course outcomes, you will need to submit a complete lesson plan with your reflection.

Teachers determine how much time will be allocated on each lesson and will document that time on the reflection. One teacher may take an hour on a “soils lesson” another may take 3 hours; both are acceptable toward total hours toward credit. Research suggests that reflecting on our teaching is extremely valuable and leads to improved teaching and learning.

The hours reported on each **Instructional Hours Reflection** is totaled and displayed on the **My Progress** link on the course homepage. Upon completion of each lesson plan (which may span a week or more), complete the **Instructional Hours Reflection** located on the course menu. The **Instructional Hours Reflection** requires the following information: 1) lesson plan title, 2) number of classroom instructional hours spent on this lesson, 3) number of students in the classroom, 4) strength of the lesson and/or improvement suggestions, 5) additional classroom activities conducted and additional classroom resources used and, 6) teaching strategies or methods used to deliver this lesson.

Course Progress

To check your progress in the course, click on the **My Progress** link on the right side navigation.

Final Strategy Report

The **Final Strategy Report** must be completed within one year of starting the course. This report is completed using the **Final Strategy Report Reflection** found on the main navigation of the course homepage. The **Final Strategy Report** asks you to “Outline your strategy for implementing Food, Land & People and Agriculture in the Classroom concepts, lesson plans, and activities into your classroom in the future.” Your response should include specifics about what lessons, activities, teaching and instructional strategies, and other integration tactics you plan to use in your curriculum during the next year. Report examples can be viewed from a link on the **Final Strategy Reflection** page.

Grades/Transcripts

Grades will be posted after all course requirements are completed and the **Final Strategy Report** is evaluated and accepted. The course instructor will send you an email notification that your grade has been posted. Please note that grades will only be posted on transcripts on the following dates: December 20, April 1, July 1, and October 1. This email will also include your USU Banner user ID (that you will need to access your transcript online) and instructions on how to access course materials for future use. An unofficial transcript can be downloaded or an official transcript can be purchased from the Utah State University Registrars Office, <http://usu.edu/registrar/records/>. If you need a letter of completion prior to the close of the semester, please contact your instructor.

Approved Copyrighted Lesson Plans

All of the resources (lesson plans, readings, kits, etc.) necessary to complete the course requirements are on the Utah Agriculture in the Classroom or course website. In addition to these online resources, you may use the following copyrighted resources to fulfill the course requirements:

- [*Farm to Table and Beyond*](http://www.gardeningwithkids.org/11-3310.html): This instructional guide covers our global food system and how the parts of this complex system interact with and influence each other—critical ideas in science. Students engage in hands-on investigations of the cycling of matter in nature and the human impact on this cycle, explore and analyze their personal food choices through scientific reasoning, and apply what they have learned through discussions and debates. *Farm to Table & Beyond* includes teacher lesson plans, background information, teaching tips, and tools for assessment; student activity sheets and readings; and a matrix mapping the book to National Science Education Standards and Benchmarks for Science Literacy. Grades 5-7, 432 pages. <http://www.gardeningwithkids.org/11-3310.html>
- [*Garden Genetics: Teaching with Edible Plants*](http://www.nsta.org/store/product_detail.aspx?id=10.2505/9780873552646): This two-part set—a teacher edition and companion student edition—is adaptable to biology students at all levels, including AP. It uses a series of activities and inquiry-based experiments with familiar foods to teach genetics while helping students make connections to ecology, evolution, plant biology, and even social science. What makes *Garden Genetics* unique is its emphasis on modern food-plant-based situations. Grades 7-12, 331 pages. http://www.nsta.org/store/product_detail.aspx?id=10.2505/9780873552646
- [*The Growing Classroom: Garden-Based Science*](http://www.gardeningwithkids.org/11-4017.html): A wonderful collection of classic garden activities, *The Growing Classroom* is a teacher's manual featuring step-by-step instructions and strategies for setting up a garden-based science program and outdoor classroom activities. Topics include planning a garden laboratory, facilitating investigative lessons on ecology and nutrition, and involving the community. Includes an expanded gardening resource section. Grades 2-6, 464 pages. <http://www.gardeningwithkids.org/11-4017.html>
- [*GrowLab Activities for Growing Minds*](http://www.gardeningwithkids.org/10-4008.html): This complete curriculum uses fun, illustrated activities to explore plant life cycles, examine plant diversity, and investigate the interdependence of plants, humans, and other living and nonliving things. It's a must for any plant-based studies! Meets National Science Standards. Grades K-8, 307 pages. <http://www.gardeningwithkids.org/10-4008.html>
- [*GrowLab, A Complete Guide to Gardening in the Classroom*](http://www.gardeningwithkids.org/10-4009.html): Comprehensive book includes information on planning and planting an indoor garden, tackling pests and other challenges, and much more. This well-written, easy-to-follow resource will guide you to growing success. Grades K-12, 112 pages. <http://www.gardeningwithkids.org/10-4009.html>
- [*Healthy Foods from Healthy Soils*](http://www.gardeningwithkids.org/11-2155.html): Help children understand how their food choices affect not only their own health, but also farmers, the environment, and your local community. This book invites you and your students to discover where food comes from, how our bodies use food, and what happens to food waste. Includes background information and a guide for integrating activities into the classroom. 256 pages; gr K-6. <http://www.gardeningwithkids.org/11-2155.html>
- [*Math in the Garden*](http://www.gardeningwithkids.org/11-3111.html): This engaging curriculum uses a mathematical lens to take children on an education-filled exploration of the garden. Dozens of hands-on activities hone math skills and promote inquiry, language arts, and nutrition. All the activities were developed to support mathematics and science standards and were extensively trial-tested by educators and youth leaders nationwide. Grades K-8, 160 pages. <http://www.gardeningwithkids.org/11-3111.html>
- [*Gourmet Lab*](http://www.nsta.org/store/product_detail.aspx?id=10.2505/9781936137084): Hands-on, inquiry-based, and relevant to every student's life, *Gourmet Lab* serves up a full menu of activities for science teachers of grades 6–12. This collection of 15 hands-on experiments—each of which includes a full set of both student and teacher pages—challenges students to take on the role of scientist and chef, as they boil, bake, and toast their way to better understanding of science concepts from chemistry, biology, and physics. By cooking edible items such as pancakes and butterscotch, students have the opportunity to learn about physical changes in states of matter, acids and bases, biochemistry, and molecular structure. Grades 6-12, 344 pages. http://www.nsta.org/store/product_detail.aspx?id=10.2505/9781936137084