

**EL DORADO UNION HIGH SCHOOL DISTRICT  
EDUCATIONAL SERVICES  
Course of Study Information Page**

COURSE TITLE <b>Advanced Agriculture Food Science</b>	
DISTRICT COURSE NUMBER 0728	4-DIGIT STATE COURSE CODE (COMPLETED BY SILT)
Rationale:	<p>The Advanced Food Science course serves as the capstone in the Agriscience pathway within the Agriculture and Natural Resources sector. It allows students to apply their knowledge of growing, tending, and harvesting crops by managing garden plots and using their produce to plan and prepare nutritious, seasonal meals. Through hands-on experience, students will explore the full food system—from farm to table—while learning how to increase crop yield, support healthy eating, and practice sustainable agriculture. This course emphasizes the connection between agriculture and modern cuisine, encouraging students to think critically about the role of food in both personal health and community well-being.</p> <p>In addition to practical skills, students will explore the history and evolution of agriculture in California, including traditional Indigenous practices and the effects of industrialized farming. They will research food access challenges in underserved communities and study the role of urban farming and community gardens in addressing these issues. By designing gardens tailored to their own neighborhoods, students will create solutions that support healthier food choices and strengthen local food systems. This course prepares students to become informed leaders in sustainable agriculture, nutrition, and community health.</p>
Course Description that will be in the Course Directory:	<p>This course is designed as the capstone course as part of a sequence in the Agriculture and Natural Resources sector Agriscience pathway. Students will utilize their skills in designing, cultivating, growing, and harvesting crops from the garden plots that they have been established to cultivate and prepare meals and seasonal menus that incorporate items from the garden and farm that represent healthy and nutritious food choices aligned to the “whole system” farming in modern cuisine. Students will deepen their understanding of the essential requirements in growing and tending their plots and farm in order to produce variety and maximize crop yield. Students will explore the history of agriculture in California and research the concept of “Passive Agriculture” utilized by indigenous Californians and the disconnect that exists between post-modern urban society and nature. Students will research and illustrate contemporary industrialized agriculture and its effect on farming techniques including livestock locally, nationally, and globally and explain the emerging, innovative, and controversial trends in agriculture production and harvesting. Students will research and explore the unequal access to fresh food choices in economically disadvantaged communities and discuss the legacy of urban farming and the victory garden movement. Students will design gardens for their neighborhoods that support the community as a whole in planning and preparing meals that are from farm to table in support of healthy eating and nutrition to address the health challenges facing the community.</p>
How Does this Course align with or meet State and District content standards?	The Advanced Food Science course supports the California CTE Agriculture and Natural Resources standards, specifically in the Agriscience Pathway. Students apply

	<p>hands-on skills in gardening, food preparation, and sustainability, which align with state standards in areas such as:</p> <p>Sustainable agriculture – using eco-friendly methods to grow and harvest crops.</p> <p>Nutrition and food safety – preparing healthy meals using fresh produce.</p> <p>Scientific investigation – experimenting with growing techniques and improving crop yield.</p> <p>Communication and leadership – working in teams and sharing garden plans and food access solutions.</p> <p>The course also supports key CTE anchor standards like problem-solving, teamwork, and technical skill development—helping students prepare for both college and careers.</p> <p>In El Dorado County, this course matches district goals by offering real-world, project-based learning. It connects students with local agriculture, supports career pathways in food and environmental sciences, and helps students design garden projects that benefit their communities. Overall, it gives students the tools to make a real impact through sustainable agriculture and healthy food systems.</p>															
Core Subjects:	<p><i>Select up to two that apply:</i></p> <table border="0" style="width: 100%;"> <tr> <td><input type="checkbox"/> Arts</td> <td><input type="checkbox"/> Civics and Government</td> <td rowspan="6" style="vertical-align: top;">XNot Core Subject</td> </tr> <tr> <td><input type="checkbox"/> Economics</td> <td><input type="checkbox"/> History</td> </tr> <tr> <td><input type="checkbox"/> English</td> <td><input type="checkbox"/> Mathematics</td> </tr> <tr> <td><input type="checkbox"/> Foreign Language</td> <td><input type="checkbox"/> Reading / Language Arts</td> </tr> <tr> <td><input type="checkbox"/> Geography</td> <td><input type="checkbox"/> Science</td> </tr> <tr> <td></td> <td></td> </tr> </table>			<input type="checkbox"/> Arts	<input type="checkbox"/> Civics and Government	XNot Core Subject	<input type="checkbox"/> Economics	<input type="checkbox"/> History	<input type="checkbox"/> English	<input type="checkbox"/> Mathematics	<input type="checkbox"/> Foreign Language	<input type="checkbox"/> Reading / Language Arts	<input type="checkbox"/> Geography	<input type="checkbox"/> Science		
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<p>CDE CALPADS Course Descriptors:</p> <p>(See Page 2 for Definitions)</p>	<p>CTE TECH PREP COURSE INDICATORS</p> <p><input type="checkbox"/> Tech Prep (32) (Higher Ed)</p> <p><input type="checkbox"/> Tech Prep &amp; ROP(33) (Higher Ed)</p> <p><input type="checkbox"/> ROP (30)</p> <p><input type="checkbox"/> N/A</p>	<p>CTE COURSE CONTENT CODE</p> <p><input type="checkbox"/> CTE Introductory (01)</p> <p><input type="checkbox"/> CTE Concentrator (02)</p> <p><input checked="" type="checkbox"/> CTE Completer (03)</p> <p><input type="checkbox"/> Voc Subject _____</p> <p><input type="checkbox"/> N/A</p>	<p>INSTRUCTIONAL LEVEL CODE</p> <p><input type="checkbox"/> Remedial (35)</p> <p><input type="checkbox"/> Honors UC-Certified (39)</p> <p><input type="checkbox"/> Honors Non UC-Certified (34)</p> <p><input type="checkbox"/> College (40)</p> <p><input type="checkbox"/> N/A</p>													
Length of Course:	<p>XYear      <input type="checkbox"/> Semester</p>															
Grade Level(s):	<p><input type="checkbox"/> 9      <input type="checkbox"/> 10      X11      X12</p>															
Credit:	<p><input type="checkbox"/> Number of credits: _____</p> <p><input type="checkbox"/> Meets graduation requirements (subject _____)</p> <p><input type="checkbox"/> Request for UC "a–g" requirements CSU/UC requirement _____</p>		<p>XCollege Prep</p>													
Prerequisites:	<p>Intro Ag Science, Food Science</p>															
Department(s):	<p>Agriculture</p>															
District Sites:	<p>Union Mine</p>															

Board of Trustees COS Adoption Date:	
Textbooks / Instructional Materials:	Title Author Publisher Edition Website Primary Principles of Food Science Janet D Ward Goodheart-Willcox Fourth/2013 [ empty ] Yes Literary Texts Title Author Publisher Edition Website Read in entirety The Omnivore's Dilemma: The Secret Behind What You Eat Michael Pollan Penguin Group Young Readers Edition, 2009 [ empty ] No The Third Plate: Field Notes on the Future of Food Dan Barber Penguin 1st Edition, 2015 [ empty ] No Manuals Title Author Publisher Edition Website Read in entirety Western Garden Book [ empty ] Sunset Publishing 8th Edition, 2007 [ empty ] No Pat Welsh's Southern California Gardening: A Month by Month Guide Pat Welsh Chronicle Books LLC 2000 [ empty ] No Websites
Funding Source:	CTEG, Perkins, Ag Incentive
Board of Trustees Textbook Adoption Date:	12-9-2025

### Definitions

CALPADS	California Longitudinal Pupil Achievement Data System
CTE Technical Prep	A course within a CTE technical career pathway or program that has been articulated with a postsecondary education or through an apprenticeship program of at least 2 years following secondary instruction.
Instructional Level Code	Represents a nonstandard instructional level at which the content of a specific course is either above or below a 'standard' course instructional level. These levels may be identified by the actual level of instruction or identified by equating the course content and level of instruction with a state or nationally recognized advanced course of study, such as IB or AP.
Instructional Level Honors, UC Certified	Includes all AP courses.
Instructional Level Honors, non UC Certified	Requires Board approval.
Instructional Level College	Includes ACE courses. Equivalent to college course and content, but not an AP course. Not related to section, but to course.

EL DORADO UNION HIGH SCHOOL DISTRICT

**EDUCATIONAL SERVICES**

**Course Title: Advanced Food Science**

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## EDUCATIONAL SERVICES

Department: **Agriculture**

Course Title: **Advanced Food Science**

Course Number: \_\_\_\_\_

Unit Title:  
Sustainable  
Agriculture  
and Ecology

**Content Area Standards** (Please identify the source): List content standards students will master in this unit.

**Standard:** ANR D5.0

**Content Standard:**

Students will explore **techniques for growing and harvesting food using environmentally responsible practices**, such as soil conservation, integrated pest management, and crop rotation.

**Source:** California Agriculture and Natural Resources (ANR) Standards

**Unit Outline:** A detailed descriptive summary of all topics covered in the unit. Explain what the students will learn, know and be able to do.

**Topics Covered:**

- Principles of sustainable agriculture
- Soil conservation methods (cover cropping, no-till farming)
- Composting and organic matter recycling
- Integrated Pest Management (IPM)
- Water conservation techniques (drip irrigation, mulching)
- Crop rotation and biodiversity practices
- Environmental impacts of farming

**Students will learn to:**

- Explain the importance of sustainability in agriculture
- Identify and implement eco-friendly farming methods
- Analyze the ecological impact of various agricultural practices
- Design a sustainable planting system for a small garden or community farm

**Students will know and be able to:**

- Use composting techniques to enrich soil

- Plan rotations to enhance yield and soil health
- Apply IPM principles in plant management
- Reduce resource waste in gardening and food production

**Instructional Strategies:** Indicate how the Instructional Strategies support the delivery of the curriculum and the course goals. Indicate how assignments support the Anchor Standards.

**Instructional Strategies:**

- Inquiry-based learning through student-designed garden plans
- Fieldwork in school/community gardens
- Use of visual aids (diagrams of soil layers, compost systems)
- Peer collaboration for planning sustainable garden beds

**Support for Course Goals & Anchor Standards:**

- Encourages **critical thinking (Anchor 5.0)** via environmental problem-solving
- Assignments (e.g., compost experiment reports, garden plan proposals) align with **Anchor 10.0** by developing technical agricultural skills

**Assessments:** Describe the Formative and Summative assessments that will be used to demonstrate learning and mastery of the standards.

**Formative assessments** include garden journals, exit tickets on sustainability concepts, and peer-reviewed composting plans. **Summative assessments** include a detailed sustainable garden design project and a presentation on environmentally responsible farming methods.

**Interventions:** Describe methods used to support students who fail to master unit Formative and Summative assessments.

Students who struggle with key concepts like sustainable farming practices or garden planning will receive targeted reteaching during priority periods. Small-group instruction, guided garden design revisions, and one-on-one feedback help reinforce soil, composting, and water conservation strategies.

## EDUCATIONAL SERVICES

Department: **Agriculture**

Course Title: **Advanced Food Science**

Course Number: \_\_\_\_\_

Unit Title:

Nutrition and  
Food Safety

**Content Area Standards** (Please identify the source): List content standards students will master in this unit.

**Standard:** ANR D4.0

**Content Standard:**

Students will develop skills in **preparing healthy meals using fresh, garden-to-table ingredients**, while understanding nutritional value and food safety practices such as proper storage, handling, and cooking methods.

**Source:** California Agriculture and Natural Resources (ANR) Standards

**Unit Outline:** A detailed descriptive summary of all topics covered in the unit. Explain what the students will learn, know and be able to do.

**Topics Covered:**

- Basic human nutrition principles
- Macro and micronutrients and their food sources
- Reading and understanding nutrition labels
- Garden-to-table meal planning
- Safe food handling and sanitation
- Storage and cooking temperatures
- Preventing foodborne illnesses

**Students will learn to:**

- Evaluate the nutritional content of meals
- Plan balanced meals using garden produce
- Practice safe food handling from harvest to plate

**Students will know and be able to:**

- Use food thermometers and storage guidelines
- Follow procedures to prevent contamination
- Design recipes using local, seasonal ingredients

- Make informed dietary choices based on nutrition science

**Instructional Strategies:** Indicate how the Instructional Strategies support the delivery of the curriculum and the course goals. Indicate how assignments support the Anchor Standards.

**Instructional Strategies:**

- Direct instruction on food safety and nutrition
- Hands-on cooking labs using harvested produce
- Nutrition label analysis and meal planning exercises
- Role-playing food safety scenarios

**Support for Course Goals & Anchor Standards:**

- Reinforces **Anchor 10.0 (Technical Skills)** through food preparation activities
- Promotes **problem solving (Anchor 5.0)** in designing balanced meals
- Assignments support standards by requiring students to apply knowledge in real-world tasks (e.g., creating a week-long menu plan using school garden produce)

**Assessments:** Describe the Formative and Summative assessments that will be used to demonstrate learning and mastery of the standards.

**Formative assessments** include quizzes on food safety procedures, meal planning worksheets, and hands-on kitchen checklists. **Summative assessments** involve preparing a healthy garden-to-table meal and submitting a written analysis of its nutritional value and safety protocols.

**Interventions:** Describe methods used to support students who fail to master unit Formative and Summative assessments.

Students needing support with food safety protocols or nutrition concepts will participate in hands-on kitchen safety refreshers, visual aids, and step-by-step nutrition planning during priority periods. Modified cooking labs and small-group meal prep sessions help reinforce technical skills and safety awareness.

## EDUCATIONAL SERVICES

Department: **Agriculture**

Course Title: **Advanced Food Science**

Course Number: \_\_\_\_\_

Unit

Title:Scientific  
Investigation  
and  
Experimentati  
on

**Content Area Standards** (Please identify the source): List content standards students will master in this unit.

**Standard:** ANR D2.0

**Content Standard:**

Students will conduct investigations related to **soil health, plant biology, and seasonal crop yield optimization**, using scientific methods and data analysis to evaluate outcomes.

**Source:** California Agriculture and Natural Resources (ANR) Standards

**Unit Outline:** A detailed descriptive summary of all topics covered in the unit. Explain what the students will learn, know and be able to do.

**Topics Covered:**

- Scientific method applied to agriculture
- Soil testing and pH analysis
- Plant growth variables (light, water, nutrients)
- Data collection and interpretation
- Hypothesis formation and experimentation
- Seasonal impacts on yield
- Analyzing agricultural research

**Students will learn to:**

- Design and conduct scientific experiments
- Test soil and assess its fitness for planting
- Evaluate how different variables affect plant growth

**Students will know and be able to:**

- Collect and graph data
- Write lab reports detailing methodology and results

- Adjust growing conditions based on findings
- Use scientific thinking to solve agricultural problems

**Instructional Strategies:** Indicate how the Instructional Strategies support the delivery of the curriculum and the course goals. Indicate how assignments support the Anchor Standards.

**Instructional Strategies:**

- Lab experiments testing plant growth under different variables
- Scientific journaling and data collection
- Collaborative hypothesis testing
- Use of digital tools for graphing and data analysis

**Support for Course Goals & Anchor Standards:**

- Promotes **Anchor 5.0** by encouraging evidence-based problem solving
- Aligns with **Anchor 10.0** through technical experimentation processes
- Assignments (e.g., lab reports, experimental design presentations) reinforce critical thinking and scientific communication

**Assessments:** Describe the Formative and Summative assessments that will be used to demonstrate learning and mastery of the standards.

**Formative assessments** consist of daily lab notebooks, hypothesis proposals, and group data discussions.

**Summative assessments** include a complete lab report with analysis, and a class presentation of experimental findings tied to plant growth or soil testing.

**Interventions:** Describe methods used to support students who fail to master unit Formative and Summative assessments.

Priority periods will be used for reteaching scientific method steps, reviewing data analysis, and troubleshooting experiments. Students may reattempt labs with teacher support, use scaffolded lab report templates, or participate in peer-supported study groups to build confidence in scientific reasoning.

## EDUCATIONAL SERVICES

Department: **Agriculture**

Course Title: **Advanced Food Science**

Course Number: \_\_\_\_\_

Unit

Title: Agriculture  
Business  
and  
Communication

**Content Area Standards** (Please identify the source): List content standards students will master in this unit.

**Standard:** ANR D6.0

**Content Standard:**

Students will learn to **design community-based garden projects**, and **present solutions to food access issues** using business planning and communication strategies.

**Source:** California Agriculture and Natural Resources (ANR) Standards

**Unit Outline:** A detailed descriptive summary of all topics covered in the unit. Explain what the students will learn, know and be able to do.

**Topics Covered:**

- Basics of agri-business and entrepreneurship
- Community garden planning
- Identifying local food deserts and proposing solutions
- Budgeting and funding for garden projects
- Marketing local food and community programs
- Public speaking and presentations

**Students will learn to:**

- Develop project proposals for school or community gardens
- Communicate effectively about agricultural solutions
- Create outreach materials for food access programs

**Students will know and be able to:**

- Build a simple budget and business plan
- Use digital tools to present ideas (slides, infographics)
- Conduct needs assessments in their communities

- Advocate for local food initiatives

**Instructional Strategies:** Indicate how the Instructional Strategies support the delivery of the curriculum and the course goals. Indicate how assignments support the Anchor Standards.

**Instructional Strategies:**

- Project-based learning via garden business plans
- Guest speakers from local food organizations
- Budget simulations and cost analysis
- Group marketing presentations

**Support for Course Goals & Anchor Standards:**

- Reinforces **Anchor 9.0 (Leadership and Teamwork)** through group collaboration
- Supports **Anchor 5.0** via project planning and financial decision-making
- Assignments such as creating mock grant proposals or advertising campaigns build real-world communication and entrepreneurial skills

**Assessments:** Describe the Formative and Summative assessments that will be used to demonstrate learning and mastery of the standards.

**Formative assessments** involve brainstorming sessions, budget planning drafts, and marketing strategy feedback. **Summative assessments** include the creation and presentation of a community garden business proposal, evaluated using a rubric.

**Interventions:** Describe methods used to support students who fail to master unit Formative and Summative assessments.

Students struggling with business planning or presentations will receive additional coaching during priority periods. This may include reviewing budgeting basics, brainstorming communication strategies, or rehearsing presentations in a low-pressure environment with personalized feedback.

## EDUCATIONAL SERVICES

Department: **Agriculture**

Course Title: **Advanced Food Science**

Course Number: \_\_\_\_\_

Unit

Title: Understanding Agriscience Systems

**Content Area Standards** (Please identify the source): List content standards students will master in this unit.

**Standard:** ANR D1.0

**Content Standard:**

Students will gain a foundational understanding of **modern agriscience systems**, including crop and livestock production, biotechnology, and sustainability in food production systems.

**Source:** California Agriculture and Natural Resources (ANR) Standards

**Unit Outline:** A detailed descriptive summary of all topics covered in the unit. Explain what the students will learn, know and be able to do.

**Topics Covered:**

- Overview of agriculture systems (crops, livestock, biotech)
- Conventional vs. organic farming
- The role of technology in agriculture
- The food supply chain: from farm to table
- Careers in agriscience

**Students will learn to:**

- Identify the components of modern agricultural systems
- Compare production methods and their outcomes
- Understand how food moves from farm to consumer

**Students will know and be able to:**

- Trace a product through the food supply chain
- Recognize major challenges in food production
- Describe roles in agricultural careers

- Differentiate between sustainable and industrial systems

**Instructional Strategies:** Indicate how the Instructional Strategies support the delivery of the curriculum and the course goals. Indicate how assignments support the Anchor Standards.

**Instructional Strategies:**

- Interactive lectures and discussions
- Case studies comparing conventional and organic farming
- Research projects on ag careers or technologies
- Virtual farm tours and multimedia tools

**Support for Course Goals & Anchor Standards:**

- Builds **Anchor 10.0** by exposing students to modern ag systems
- Encourages **Anchor 5.0** by asking students to solve real-world ag problems (e.g., food distribution bottlenecks)
- Assignments include career exploration portfolios and farm system analysis reports

**Assessments:** Describe the Formative and Summative assessments that will be used to demonstrate learning and mastery of the standards.

**Formative assessments** include comprehension quizzes, ag systems comparison charts, and group discussions. **Summative assessments** consist of a research project or digital presentation tracing the farm-to-table pathway of a food item, including sustainable practices.

**Interventions:** Describe methods used to support students who fail to master unit Formative and Summative assessments.

For students not mastering ag system content, interventions include targeted review sessions with multimedia aids, vocabulary reinforcement, and visual organizers to clarify concepts. Priority periods also offer time to revise and expand farm-to-table system research with teacher guidance.

## EDUCATIONAL SERVICES

Department: **Agriculture**

Course Title: **Advanced Food Science**

Course Number: \_\_\_\_\_

Unit

Title:Historical  
and Cultural  
Aspects of  
Agriculture

**Content Area Standards** (Please identify the source): List content standards students will master in this unit.

**Standard:** ANR D3.0

**Content Standard:**

Students will examine the **historical and cultural impact of agriculture**, with a focus on **Indigenous agricultural practices, California farming history, and equity in food systems.**

**Source:** California Agriculture and Natural Resources (ANR) Standards

**Unit Outline:** A detailed descriptive summary of all topics covered in the unit. Explain what the students will learn, know and be able to do.

**Topics Covered:**

- Indigenous agricultural knowledge and systems
- California agriculture history
- Immigration and labor in food systems
- Cultural food traditions and heritage crops
- Food justice and equity

**Students will learn to:**

- Analyze the historical roots of modern agriculture
- Appreciate the cultural significance of food practices
- Identify inequities in food access and distribution

**Students will know and be able to:**

- Research Indigenous practices still in use today
- Explain how policy and history have shaped agriculture
- Present on cultural dishes and the crops they rely on

- Propose equitable food system improvements

**Instructional Strategies:** Indicate how the Instructional Strategies support the delivery of the curriculum and the course goals. Indicate how assignments support the Anchor Standards.

**Instructional Strategies:**

- Research presentations on Indigenous agriculture
- Food history storytelling and recipe sharing
- Socratic seminars on food equity
- Mapping cultural foodways

**Support for Course Goals & Anchor Standards:**

- Strengthens **Anchor 9.0** by encouraging respectful collaboration and cultural understanding
- Promotes **Anchor 5.0** via discussions on social issues and food justice
- Assignments like cultural dish presentations and food equity proposals tie content to lived experiences and communication skills

**Assessments:** Describe the Formative and Summative assessments that will be used to demonstrate learning and mastery of the standards.

**Formative assessments** include journal reflections, primary source analysis, and group discussions on food equity. **Summative assessments** include a multimedia cultural food history presentation and a written proposal addressing a food justice issue.

**Interventions:** Describe methods used to support students who fail to master unit Formative and Summative assessments.

Students who need support will attend small-group discussions focused on understanding food justice, cultural practices, and historical context. Priority periods are used for research scaffolding, access to additional sources, and personalized guidance on their presentations or proposals.

## EDUCATIONAL SERVICES

Department: **Agriculture**

Course Title: **Advanced Food Science**

Course Number: \_\_\_\_\_

### Unit

Title: Problem Solving and Critical Thinking

**Content Area Standards** (Please identify the source): List content standards students will master in this unit.

**Standard:** Anchor 5.0

**Content Standard:**

Students will apply **problem-solving strategies to real-world food system challenges**, including garden design, climate considerations, and resource limitations.

**Source:** California CTE Anchor Standards

**Unit Outline:** A detailed descriptive summary of all topics covered in the unit. Explain what the students will learn, know and be able to do.

#### **Topics Covered:**

- Identifying challenges in food systems (climate, access, soil)
- Design thinking applied to garden projects
- Evaluating resource use and efficiency
- Using critical thinking to troubleshoot growing problems
- Case studies in local and global food issues

#### **Students will learn to:**

- Think creatively and critically about agricultural problems
- Design and test garden solutions
- Evaluate trade-offs in decision-making

#### **Students will know and be able to:**

- Develop prototypes or mockups of food system solutions
- Justify their decisions with evidence and logic
- Adapt plans based on feedback and real-world constraints

**Instructional Strategies:** Indicate how the Instructional Strategies support the delivery of the curriculum and the course goals. Indicate how assignments support the Anchor Standards.

**Instructional Strategies:**

- Design-thinking protocols for garden-based challenges
- Student-led inquiry and solution testing
- Peer feedback and revision cycles
- Real-world scenarios requiring adaptation and innovation

**Support for Course Goals & Anchor Standards:**

- Directly addresses **Anchor 5.0** (Problem Solving) through project work
- Uses **Anchor 9.0** in collaborative design projects
- Assignments (e.g., garden layout redesign or food system improvement plans) help students synthesize knowledge from multiple units

**Assessments:** Describe the Formative and Summative assessments that will be used to demonstrate learning and mastery of the standards.

**Formative assessments** include brainstorming logs, design mock-ups, and peer review feedback sessions. **Summative assessments** include a complete garden-based solution project where students identify a problem, test a solution, and present their findings.

**Interventions:** Describe methods used to support students who fail to master unit Formative and Summative assessments.

Interventions include guided reworking of design plans, brainstorming help, and peer collaboration to rethink solutions. During priority periods, students receive coaching on identifying the root cause of challenges and refining their problem-solving strategies using checklists and teacher modeling.

## EDUCATIONAL SERVICES

Department: **Agriculture**

Course Title: **Advanced Food Science**

Course Number: \_\_\_\_\_

Unit Title:  
Leadership  
and  
Teamwork

**Content Area Standards** (Please identify the source): List content standards students will master in this unit.

**Standard:** Anchor 9.0

**Content Standard:**

Students will demonstrate **leadership and collaboration skills** by working in teams to **plan, grow, and present farm-to-table solutions**.

**Source:** California CTE Anchor Standards

**Unit Outline:** A detailed descriptive summary of all topics covered in the unit. Explain what the students will learn, know and be able to do.

**Topics Covered:**

- Group roles and effective collaboration
- Planning a farm-to-table project as a team
- Conflict resolution and communication
- Leadership styles and strengths
- Project management tools

**Students will learn to:**

- Function effectively in group roles
- Take initiative and delegate tasks
- Reflect on their leadership and collaboration skills

**Students will know and be able to:**

- Use planning tools (Gantt charts, checklists)
- Lead parts of a collaborative food project
- Resolve team challenges constructively
- Present their group's results to an audience

**Instructional Strategies:** Indicate how the Instructional Strategies support the delivery of the curriculum and the course goals. Indicate how assignments support the Anchor Standards.

**Instructional Strategies:**

- Structured team projects with rotating leadership roles
- Reflective journaling on group dynamics
- Use of team contracts and peer evaluations
- Public presentations of group work

**Support for Course Goals & Anchor Standards:**

- Core focus on **Anchor 9.0** (Leadership and Teamwork)
- Supports **Anchor 5.0** by having students manage project-based challenges
- Assignments include leadership reflections and team project portfolios to document collaboration and progress

**Assessments:** Describe the Formative and Summative assessments that will be used to demonstrate learning and mastery of the standards.

**Formative assessments** involve leadership self-assessments, team contracts, and peer evaluations.

**Summative assessments** include a group farm-to-table planning project and a reflection essay on group roles, collaboration, and leadership skills demonstrated.

**Interventions:** Describe methods used to support students who fail to master unit Formative and Summative assessments.

Students struggling with collaboration or leadership tasks receive focused support during priority periods to build communication strategies, resolve conflicts, and practice team-building skills. Teachers may also facilitate structured reflection or assign leadership roles tailored to student strengths.

## EDUCATIONAL SERVICES

Department: **Agriculture**

Course Title: **Advanced Food Science**

Course Number: \_\_\_\_\_

### Unit

Title: Technical

Skills

Development

**Content Area Standards** (Please identify the source): List content standards students will master in this unit.

**Standard:** Anchor 10.0

**Content Standard:**

Students will apply **agricultural and culinary technical skills** in a hands-on capstone project, integrating what they've learned into a comprehensive food science demonstration.

**Source:** California CTE Anchor Standards

**Unit Outline:** A detailed descriptive summary of all topics covered in the unit. Explain what the students will learn, know and be able to do.

#### **Topics Covered:**

- Applying knowledge from all previous units
- Hands-on gardening, harvesting, and cooking
- Presentation skills
- Food plating and nutrition tracking
- Final farm-to-table project demonstration

#### **Students will learn to:**

- Integrate agriculture and culinary skills
- Complete a full cycle: grow, harvest, prepare, and serve
- Present their work professionally

#### **Students will know and be able to:**

- Demonstrate culinary techniques (chopping, sautéing, plating)
- Use harvested produce to prepare nutritious meals
- Present capstone projects to a public audience
- Reflect on personal growth and learning

**Instructional Strategies:** Indicate how the Instructional Strategies support the delivery of the curriculum and the course goals. Indicate how assignments support the Anchor Standards.

**Instructional Strategies:**

- Culminating project-based learning integrating all course content
- Hands-on cooking and gardening demonstrations
- Mentorship and teacher guidance
- Capstone showcase presentations

**Support for Course Goals & Anchor Standards:**

- Aligns heavily with **Anchor 10.0** (Technical Skills)
- Involves **Anchor 5.0** through planning and problem solving
- Emphasizes **Anchor 9.0** through teamwork in final presentations
- Assignments include final product evaluation, public demonstration, and reflection essay

**Assessments:** Describe the Formative and Summative assessments that will be used to demonstrate learning and mastery of the standards.

**Formative assessments** include project planning check-ins, skill demonstration rubrics, and teacher feedback. **Summative assessments** include a final capstone project presentation (garden-to-table demonstration), with an evaluation of technical skills, creativity, and a written reflection.

**Interventions:** Describe methods used to support students who fail to master unit Formative and Summative assessments.

Students requiring extra help with their capstone projects receive targeted skill-building sessions during priority periods, such as mini-workshops on cooking, plating, or presentation skills. Teachers provide checklists, modeling, and extended time or alternative methods to demonstrate mastery.