

**MVLA  
2025-26  
COURSE INFORMATION SHEET**

**Course Title:** Agricultural Ecology

**School:** Los Altos High School

**CTE Pathway Sequence (if applicable):** N/A

**UC/CSU requirement:** This class fulfills one of the two science requirements for high school graduation. At the college level, this course meets the elective requirement for UC or CSU admissions.

**Textbook and/or other learning resources:** No textbook is required for this class. The Garden Laboratory will be our main learning resource.

**Course Description:**

Agricultural Ecology is the scientific study of sustainable agriculture. Human actions are considered sustainable when ecosystem resources are used without depleting the ability of said resources to meet the needs of future generations. This study and method treats the farm or garden as an ecosystem and considers all the interactions between the living and non-living aspects of the environment.

**Student Learning Outcomes:**

This class will focus on the cultivation of annual edible and ornamental plants. As each plant goes through its complete lifecycle, we will have the opportunity and privilege to observe and document all the stages of its life, from seed to seedling to mature plant to reproductive stage.

This course emphasizes the art of actively creating and constructing our food instead of passively consuming it. This ideological framework can then also be applied to education, entertainment, mental and physical health, relationships, travel, and almost all areas of life.

**Course Outline/Units of Study/CTE Industry Standards(If applicable to your course):**

**CLASS TOPICS MAY INCLUDE:**

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| <ul style="list-style-type: none"><li>• Animal husbandry</li><li>• Biodiversity's importance in organic agriculture</li><li>• Composting theory and techniques</li><li>• Conventional agriculture problems and issues</li><li>• Drip irrigation</li><li>• Ecology of soil and garden</li><li>• Frost protection</li><li>• GMOs in our food supply</li><li>• Growing and caring for annuals and perennials</li><li>• IPM (Integrated Pest Management)</li><li>• Journaling (recording data)</li><li>• Mulching</li><li>• Nature appreciation</li><li>• Nutrition</li><li>• Observation and experimentation using the garden as a living laboratory</li></ul> | <ul style="list-style-type: none"><li>• Plant anatomy and physiology</li><li>• Plant classification (families of plants &amp; plant ID)</li><li>• Plant reproduction, both sexual through flowers and asexual with cuttings</li><li>• Planting calendars (when to plant what)</li><li>• Preparing in-ground garden beds</li><li>• Recipes for eating and tasting what we harvest</li><li>• Seed saving</li><li>• Soil science; soil analysis and amendment</li><li>• Sowing seeds, both in flats and directly in beds</li><li>• Transplanting</li><li>• Water use issues</li><li>• Weather observation and reporting</li><li>• Weeds (organic methods for controlling weeds, and use of weeds)</li></ul> |
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**Assessment and Grading ([BP 5121](#) / [AR 5121](#)):** To ensure that every student has an equal opportunity to demonstrate their learning, the course instructors implement aligned grading practices and common assessments with the same frequency.

1. Grading categories and their percentage weights:
  - a. 40% Garden Activities/growing plants
  - b. 30% Classwork and Homework
  - c. 20% Tests/Quizzes
  - d. 10% Final Project
2. Achievement evidence collected within each grading category:
  - a. **Garden Plot:** How well are you caring for your raised bed? Are weeds present? Are the plants watered regularly? Have you been controlling pests? Are you harvesting appropriately? Are you transplanting and labeling plants correctly?
  - b. **Classwork:** Includes the Agricultural Ecology science notebook with write-ups of investigations, journaling, etc. Phones are put into phone pockets at the beginning of each class period.
  - c. **Assessments:** Assessments will be given. Many tests will be open note (mostly from your science notebook or other sources available to you).
  - d. **Final Assignment:** This may be a project, a lab activity, garden activity, etc.
3. Grading scales:
  - a. **A = 100%-89.5%**
  - b. **B = 89.49%-79.5%**
  - c. **C = 79.49%-69.5%**
  - d. **D = 69.49%-59.5%**
  - e. **F = 59.49% and below**
4. Homework/outside of class practices ([AR 6154](#)): We will rarely have a task to complete outside of class.
5. Excused absence make-up practices ([Education Code 48205\(b\)](#)): Any assignments or activities missed during normal class time should be completed during Academic Collaboration Time (ACT).
6. Academic integrity violation practices ([LAHS Academic Integrity Policy](#)): It's very hard to cheat off of another student's garden plot. Please inform me if you figure out a way to do this!
7. Test Retakes: Retakes may be taken up to three times to earn 80% or higher.
8. Extra credit practices: No extra credit opportunities are available in Agricultural Ecology.

**Instructors' email addresses:**

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**Additional information:**

The course as described above may change as the school year progresses. This is true of materials I may ask you to bring or that I may require for the class.

We will spend a great deal of the school year in the garden. It's a garden. People get dirty when they garden and the weather is a factor. You should dress appropriately. Always wear closed-toe shoes. A hat that provides shade is highly recommended.

**A Few Other Reminders:**

1. **NO PUT-DOWNS WHATSOEVER** – even if you're friends.
  2. **RESPECT** others and **their gardens**.
  3. **RESPECT** your own seedlings, they are ALIVE! No seedling abuse. You grow it, you transplant it or pot it up. **DO NOT LEAVE THEM TO FRY IN THE SUN!**
  4. Only **one person** should be out for a bathroom visit at any time. Bathroom visits will not be allowed during the first or last 15 minutes of class. Anybody using the bathroom must sign out and back in, this includes using the bathroom **on the way to or from the garden. Bathroom visits are not expected to last more than five minutes.**
  5. **No detours** to and from the garden.
  6. **Phones and Earbuds** should be removed and placed in the phone pockets before class starts without teacher/s asking you. **REMINDER:** This is part of your Classwork grade.
- Please stay in or at your seats until the bell rings at the end of class... **no flock of sheep at the doors!**