

Designing, Building, and Planting Appropriate Style Plantings in a Planter Box

Unit Outline

1. Project Team Members: Chris Rowles, Fred Redden, Mike Kennis, Larry Way, Jade Thompson
2. Title of Course: Technology and Agriculture
3. Title of Unit or Project: Designing, building, and planting appropriate style plantings in a planter box.
4. Approximate length of Unit or Project: 3 weeks
5. Brief description of the Unit or Project with an expected final outcome.

Students will be introduced to the designing and building of a plant box, and the different growing media available. Students will design, build and plant appropriate plants in their box.

6. Major Goals of Unit:
 - 1.1 Identify the given problem
 - 1.2 Identify the possible solutions based on needs
 - 1.3 Identify the best solution based on project requirements
 - 1.4 Design the solution
 - 1.5 Identify all parameters needed
 - 1.6 Identify sources and collect necessary materials
 - 1.7 Operate the necessary tools and equipment necessary for completing the project
 - 1.8 Identify the possible options and make adjustments
 - 1.9 Complete the different project variations based on needs

7. Sequence of balanced and integrated activities for students:

Project: The students are required to design and build a set of functional plant boxes.

Design team of class: A: Design a set of plant box blueprints based on the desired parameters.

B: Choose the best design for the given situation

Manufacturing team of class:

- C: Select appropriate material
- D: Build the plant box using the best methods/tools available.
- E: Apply finish

Agricultural team of class:

- F: Select appropriate soil mixture
- G: Add fertilizer and other desired additives
- H: Planting

8. Checklist or rubric of assessment components for students:

	Design	
Survey		20 points _____
Drawing/prints		50 points _____
Option design		30 points _____
	Construction	
Material Selection		10 points _____
Processing		50 points _____
Quality		30 points _____
Finish		10 points _____
	Soils/Planting	
Material selection		10 points _____
Soil mixture		30 points _____
Fertilizer/chemicals		20 points _____
Planting and care		40 points _____

100-90 = A 89-80 = B 79-70 = C 69-60 = D 59-0 = F

9. Specific Standards addressed in this Unit or Project:

<u>Ref. #</u>	<u>Name of Standard</u>	<u>Title of Individual Standard</u>
1.1.11	PA RWSL	Learning to read independently
1.2.11	PA RWSL	Reading critically in all content areas
1.5.11	PA RWSL	Quality of writing
1.6.11	PA RWSL	Speaking and Listening
2.2.11	PA MATH	Computation and Estimation
2.3.11	PA MATH	Measurement and Estimation
2.4.11	PA MATH	Mathematical reasoning and connections
3.2.10	PA ASST	Inquiry and design
3.3.10	PA ASST	Biological Sciences
3.6.10	PA ASST	Technology Education
3.7.10	PA ASST	Technological Devices
4.2.12	PA ASAE	Renewable and nonrenewable resources
4.4.12	PA ASAE	Agriculture and society
4.6.10	PA ASAE	Ecosystems and their interactions
4.7.10	PA ASAE	Threatened, Endangered, and Extinct Species
13.2.11	PA CEW	Career Awareness and Planning
13.2.11	PA CEW	Career acquisition (Getting a job)
7.1	PA AG	Identify and describe soil characteristics
7.4	PA AG	Conduct basic soil testing