

Unit 1: The Landscape Industry

Content Area: **CTE**
Course(s): **Horticulture III**
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An overview of the Horticulture Landscape Industry

The landscape industry is a very diverse field that includes landscape design, construction, and maintenance. Landscaping is the art and science of selecting plants and placing them in attractive and functional settings outdoors. People landscape their homes to increase the property value, to improve the appearance of their homes and surroundings, to improve the environment around their homes, or just as a hobby.

Enduring Understandings

Landscaping is a billion-dollar industry in the United States. The Gallup

Organization conducted a survey on behalf of the National Gardening Association

in 1999. It was found that, in that year, homeowners in the United States spent

\$50.9 billion to install, improve, and maintain their landscapes and gardens.

A. Three major segments of the landscaping industry are design, construction, and maintenance.

1. Landscape design pertains to the planning of a landscape project.
2. Once a design is prepared, work can begin on landscape construction, or the installation of the project.
3. Landscape maintenance deals with the care of the landscape so it will continue to be attractive over a long pe

Essential Questions

What is the Importance of the Landscape Industry Globally

Standards/Indicators/Student Learning Objectives (SLOs)

- 1 Describe the popularity of horticulture.

2 Appraise the importance of the ornamental horticulture industry.

3 Assess the importance of the olericulture industry.

4 Judge the importance of the pomology industry.

9.3.12.AG	Agriculture, Food & Natural Resources
9.3.12.AG.1	Analyze how issues, trends, technologies and public policies impact systems in the Agriculture, Food & Natural Resources Career Cluster.
9.3.12.AG.2	Evaluate the nature and scope of the Agriculture, Food & Natural Resources Career Cluster and the role of agriculture, food and natural resources (AFNR) in society and the economy.
9.3.12.AG-BIZ.1	Apply management planning principles in AFNR businesses.
9.3.12.AG-BIZ.5	Use sales and marketing principles to accomplish AFNR business objectives.
9.3.12.AG-BIZ.2	Use record keeping to accomplish AFNR business objectives, manage budgets and comply with laws and regulations.
9.3.12.AG-BIZ.3	Manage cash budgets, credit budgets and credit for an AFNR business using generally accepted accounting principles.
CAEP.9.2.12.C	Career Preparation
CAEP.9.2.12.C.1	Review career goals and determine steps necessary for attainment.
CAEP.9.2.12.C.2	Modify Personalized Student Learning Plans to support declared career goals.
CAEP.9.2.12.C.3	Identify transferable career skills and design alternate career plans.
CAEP.9.2.12.C.4	Analyze how economic conditions and societal changes influence employment trends and future education.
CAEP.9.2.12.C.5	Research career opportunities in the United States and abroad that require knowledge of world languages and diverse cultures.
CAEP.9.2.12.C.8	Assess the impact of litigation and court decisions on employment laws and practices.

Lesson Titles

- Determining the Importance of the Horticulture Industry 3days
- Examine the segments of the landscape industry. 5days
- Exploring Career Opportunities in Horticulture
- Managing the Landscape Business

Career Readiness, Life Literacies, & Key Skills

TECH.9.4.12.CI.1	Demonstrate the ability to reflect, analyze, and use creative skills and ideas (e.g., 1.1.12prof.CR3a).
TECH.9.4.12.CI.2	Identify career pathways that highlight personal talents, skills, and abilities (e.g., 1.4.12prof.CR2b, 2.2.12.LF.8).
TECH.9.4.12.CI.3	Investigate new challenges and opportunities for personal growth, advancement, and transition (e.g., 2.1.12.PGD.1).
TECH.9.4.12.CT.1	Identify problem-solving strategies used in the development of an innovative product or

practice (e.g., 1.1.12acc.C1b, 2.2.12.PF.3).

Inter-Disciplinary Connections

- 10.7.12. History/Social Studies: 9-12
- 10.7.12.SS12. History/SS: Grades 11-12
- 10.7.12.SS12.1. Cite specific textual evidence to support analysis of primary and secondary sources, connecting insights gained from specific details to an understanding of the text as a whole.
- 9.4.12.A.4. Select and employ appropriate reading and communication strategies to learn and use technical concepts and vocabulary in practice.
- RST.11-12.1. Accurately cite strong and thorough evidence from the text to support analysis of science and technical texts, attending to precise details for explanations or descriptions.
- RST.11-12.2. Determine the central ideas, themes, or conclusions of a text; summarize complex concepts, processes, or information presented in a text by paraphrasing them in simpler but still accurate terms.
- RST.11-12.3. Follow precisely a complex multistep procedure when carrying out experiments, taking measurements, or performing technical tasks; analyze the specific results based on explanations in the text.

SCI.9-12.5.1.12	All students will understand that science is both a body of knowledge and an evidence-based, model-building enterprise that continually extends, refines, and revises knowledge. The four Science Practices strands encompass the knowledge and reasoning skills that students must acquire to be proficient in science.
SCI.9-12.5.1.12.A	Students understand core concepts and principles of science and use measurement and observation tools to assist in categorizing, representing, and interpreting the natural and designed world.
SCI.9-12.5.1.12.A.2	Develop and use mathematical, physical, and computational tools to build evidence-based models and to pose theories.
SCI.9-12.5.1.12.A.a	Mathematical, physical, and computational tools are used to search for and explain core scientific concepts and principles.
TECH.8.1.12	Educational Technology: All students will use digital tools to access, manage, evaluate, and synthesize information in order to solve problems individually and collaborate and to create and communicate knowledge.

Diversity

Climate

Topic: Farming opportunities in sustainable agriculture

Materials Used: <https://sustainableagriculture.net/our-work/issues/farming-opportunities/>

Addresses the Following Component of the Mandate:

LGBTQ and Disabilities

Topic: Equitable farming programs and practices

Materials Used: <https://www.farmers.gov/your-business/lgbtq>

Addresses the Following Component of the Mandate:

Items

Add List Item

0x Economic

0x Political

0x Social

Holocaust Mandate

Created By: DePasquale, Michele, 8/4/2022 10:01:57 AM, Type: , Published

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Actions

Topic: Gender equality and sustainable agriculture

Materials Used: <https://www.ifpri.org/blog/achieving-agricultural-sustainability-depends-gender-equality>

Addresses the Following Component of the Mandate:

Items

Add List Item

0x Bias

0x Bigotry

0x Bullying

0x Holocaust Studies

0x Prejudice

Asian American Pacific Islander Mandate

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Actions

Topic: Programs and opportunities for AAPI individuals in agriculture

Materials

Used: https://www.nrcs.usda.gov/wps/portal/nrcs/detail/me/about/outreach/sep/?cid=nrcs141p2_003242

Holocaust Mandate

Topic: Gender equality and sustainable agriculture

Materials Used: <https://www.ifpri.org/blog/achieving-agricultural-sustainability-depends-gender-equality>

Asian Pacific Islander

Topic: Equitable farming programs and practices

Materials Used: <https://www.farmers.gov/your-business/asianamerican>

Addresses the Following Component of the Mandate:

Closure

- Google Survey
- Kahoot
- lesson Summary
- Quizlet

Instructional Strategies, Learning Activities, and Levels of Blooms/DOK

- Philadelphia Flower Show
- NJ State Horticultural Expo
- Student Compete in (CDE)
- Greenhouse Aquaponic
- Greenhouse Hydroponics

- conferencing
- acronyms
- Create and Install pathways
- Designing Residential and commercial Landscapes
- Designing with ProLandscape software
- Install Landscape Design
- Install Landscape plants and accents
- Landscaping Maintenance of Greenhouse grounds and courtyard
- lecture
- modeling
- Mulching Flower beds
- Partner Project/Activity
- Presentations
- Teacher Modeled Instructions
- Watering plants

Modifications

ELL Modifications

- Choice of test format (multiple-choice, essay, true-false)
- Continue practicing vocabulary
- Provide study guides prior to tests
- Read directions to the student
- Read test passages aloud (for comprehension assessment)
- Vary test formats

504 and IEP Accommodations & Modifications

- Allow for redos/retakes

- Assign fewer problems at one time (e.g., assign only odds or evens)
- Differentiated center-based small group instruction
- Extra time on assessments
- Highlight key directions
- If a manipulative is used during instruction, allow its use on a test
- Opportunities for cooperative partner work
- Provide reteach pages if necessary
- Provide several ways to solve a problem if possible
- Provide visual aids and anchor charts
- Test in alternative site
- Tiered lessons and assignments
- Use of a graphic organizer
- Use of concrete materials and objects (manipulatives)
- Use of word processor

Gifted and Talented

- Alternate assignments/enrichment assignments
- Enrichment projects
- Extension activities
- Higher-level cooperative learning activities
- Pairing direct instruction with coaching to promote self-directed learning
- Provide higher-order questioning and discussion opportunities
- Provide texts at a higher reading level
- Tiered assignments
- Tiered centers

At Risk

- Additional time for assignments
- Adjusted assignment timelines
- Agenda book and checklists
- Answers to be dictated
- Assistance in maintaining uncluttered space
- Books on tape
- Concrete examples
- Extra visual and verbal cues and prompts
- Follow a routine/schedule
- Graphic organizers

- Have students restate information
 - No penalty for spelling errors or sloppy handwriting
 - Peer or scribe note-taking
 - Personalized examples
 - Preferential seating
 - Provision of notes or outlines
 - Reduction of distractions
 - Review of directions
 - Review sessions
 - Space for movement or breaks
 - Support auditory presentations with visuals
 - Teach time management skills
 - Use of a study carrel
 - Use of mnemonics
 - Varied reinforcement procedures
 - Work in progress check
-
- Direct teaching and/or assistance for organization, social skills/peer interactions
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Formative Assessment

- Class Discussion
- Group Work
- Guided Practice
- Oral Responses/Question
- Performance Assessments
- Quiz/Test
- Teacher Observation
- Warm up

Benchmark Assessments

Benchmark Assessments:
 Skills-based assessment
 Reading response
 Writing prompt
 Lab practical

Alternative Assessments

Alternative assessments:

Performance tasks

Project-based assignments

Problem-based assignments

Presentations

Reflective pieces

Concept maps

Case-based scenarios

Portfolios

Resources & Materials

- Internet
- Landscape Software
- Power Point Presentation
- Prometheus board
- Video Streaming

Technology

TECH.8.1.12	Educational Technology: All students will use digital tools to access, manage, evaluate, and synthesize information in order to solve problems individually and collaborate and to create and communicate knowledge.
TECH.8.1.12.A.1	Create a personal digital portfolio which reflects personal and academic interests, achievements, and career aspirations by using a variety of digital tools and resources.
TECH.8.1.12.A.2	Produce and edit a multi-page digital document for a commercial or professional audience and present it to peers and/or professionals in that related area for review.
TECH.8.1.12.A.5	Create a report from a relational database consisting of at least two tables and describe the process, and explain the report results.
TECH.8.1.12.A.CS1	Understand and use technology systems.
TECH.8.1.12.A.CS2	Select and use applications effectively and productively.
TECH.8.1.12.B	Creativity and Innovation: Students demonstrate creative thinking, construct knowledge and develop innovative products and process using technology.
TECH.8.1.12.C.CS3	Develop cultural understanding and global awareness by engaging with learners of other cultures.
TECH.8.1.12.C.CS4	Contribute to project teams to produce original works or solve problems.

TECH.8.1.12.D

Digital Citizenship: Students understand human, cultural, and societal issues related to technology and practice legal and ethical behavior.

TECH.8.1.12.E.CS1

Plan strategies to guide inquiry.