



Department of Teaching & Learning
Parent/Student Course Information

Landscape Design and Management
(VO8040)
Three Credits, One Year
Grades 11 or 12

Counselors are available to assist parents and students with course selections and career planning. Parents may arrange to meet with the counselor by calling the school's guidance department.

COURSE DESCRIPTION

This course offers instruction in design techniques for landscaping and the drawing to scale of landscape plans. Students also study the use, growth, and proper care of plants, ground covers, trees and shrubs for landscaping, as well as turf management. Proper use of landscape tools and equipment is included.

CERTIFICATION

Virginia Registered Pesticide Technician Certification

National Occupational Competency Testing Institute (NOCTI) Assessment: Horticulture – Landscaping

STUDENT ORGANIZATION

SkillsUSA is a co-curricular organization for all students enrolled in trade and industrial education programs. SkillsUSA is a partnership of students, teachers and industry working together to ensure America has a skilled workforce. SkillsUSA helps students excel by providing educational programs, events and competitions that support career and technical education (CTE) in the nation's classrooms. Students are highly encouraged to participate.

PREREQUISITE

None

OPTIONS FOR NEXT COURSE

Turf Management

REQUIRED STUDENT TEXTBOOK

None

COMPETENCIES FOR LANDSCAPE DESIGN AND MANAGEMENT

Demonstrating Personal Qualities and Abilities

- 1 Demonstrate creativity and innovation.
- 2 Demonstrate critical thinking and problem solving.
- 3 Demonstrate initiative and self-direction.
- 4 Demonstrate integrity.
- 5 Demonstrate work ethic.

Demonstrating Interpersonal Skills

- 6 Demonstrate conflict-resolution skills.
- 7 Demonstrate listening and speaking skills.
- 8 Demonstrate respect for diversity.
- 9 Demonstrate customer service skills.
- 10 Collaborate with team members.

Demonstrating Professional Competencies

- 11 Demonstrate big-picture thinking.
- 12 Demonstrate career- and life-management skills.
- 13 Demonstrate continuous learning and adaptability.
- 14 Manage time and resources.
- 15 Demonstrate information-literacy skills.
- 16 Demonstrate an understanding of information security.
- 17 Maintain working knowledge of current information-technology (IT) systems.
- 18 Demonstrate proficiency with technologies, tools, and machines common to a specific occupation.
- 19 Apply mathematical skills to job-specific tasks.
- 20 Demonstrate professionalism.
- 21 Demonstrate reading and writing skills.
- 22 Demonstrate workplace safety.

Examining All Aspects of an Industry

- 23 Examine aspects of planning within an industry/organization.
- 24 Examine aspects of management within an industry/organization.
- 25 Examine aspects of financial responsibility within an industry/organization.
- 26 Examine technical and production skills required of workers within an industry/organization.
- 27 Examine principles of technology that underlie an industry/organization.
- 28 Examine labor issues related to an industry/organization.
- 29 Examine community issues related to an industry/organization.
- 30 Examine health, safety, and environmental issues related to an industry/organization.

Addressing Elements of Student Life

- 31 Identify the purposes and goals of the student organization.
- 32 Explain the benefits and responsibilities of membership in the student organization as a student and in professional/civic organizations as an adult.
- 33 Demonstrate leadership skills through participation in student organization activities, such as meetings, programs, and projects.
- 34 Identify Internet safety issues and procedures for complying with acceptable use standards.

Exploring Work-Based Learning

- 35 Identify the types of work-based learning (WBL) opportunities.

- 36 Reflect on lessons learned during the WBL experience.
- 37 Explore career opportunities related to the WBL experience.
- 38 Participate in a WBL experience, when appropriate.
- 39 Identify the role of supervised agricultural experiences (SAEs) in agricultural education.
- 40 Participate in an SAE.

Exploring Leadership Opportunities through FFA

- 41 Identify the benefits and responsibilities of FFA membership.
- 42 Describe leadership characteristics and opportunities as they relate to agriculture and FFA.
- 43 Apply for an FFA degree and/or an agricultural proficiency award.

Gaining an Overview of the Landscaping Industry

- 44 Describe the importance of the landscaping and green industry to the Virginia and U.S. economies.
- 45 Research career opportunities related to landscaping.
- 46 Identify opportunities in continuing education, training, licensure, and certification.
- 47 Analyze trends in the landscape industry.
- 48 Identify professional organizations for the landscaping industry.

Designing the Landscape

- 49 Research the historical development of landscape design.
- 50 Describe the landscape design process.
- 51 Relate the principles of art to landscape design.
- 52 Establish a client's landscaping requirements, using a residential inventory survey.
- 53 Analyze the landscape site.
- 54 Create a landscape plan for a residential or commercial property based on industry standards and recommended practices.
- 55 Design the site for function and aesthetics.
- 56 Interpret the landscape plan.
- 57 Explain the benefits of a landscape irrigation system.
- 58 Explain the benefits of a landscape lighting system.
- 59 Draw a landscape design, using industry graphics and standards.
- 60 Present the landscape plan.
- 61 Develop a landscaping portfolio.

Gaining an Overview of the Importance of Soil and Plant Science in the Landscaping Industry

- 62 Analyze a soil sample.
- 63 Examine best management practices for improving soil health.
- 64 Develop soil amendment recommendations for nursery and landscape plants.
- 65 Identify nursery and landscape plants.
- 66 Select plants for the landscape.

Constructing the Landscape

- 67 Demonstrate the use of landscape tools and related equipment.
- 68 Describe the guidelines for personal protective equipment (PPE) in the landscaping industry.
- 69 Identify common injuries in the landscaping industry.
- 70 Explain pertinent information from a container label and/or safety data sheet (SDS) according to the Environmental Protection Agency (EPA), Worker Protection Standard (WPS), and Occupational Safety and Health Administration (OSHA) regulations.
- 71 Describe emergency procedures in the landscaping workplace.
- 72 Identify landscaping tools and equipment.

- 73 Manage equipment and machinery to minimize energy consumption, maximize function, and protect water and other natural resources.
- 74 Adhere to safe operation procedures for hand tools, power tools, and landscaping or horticultural equipment and machinery.
- 75 Demonstrate the safe operation and use of landscape tools and related equipment.
- 76 Amend the soil based on a soil analysis and recommendations for the types of plants (i.e., annuals, biennials, perennials, bulbs, evergreens, coniferous, deciduous, vines, groundcovers, aquatics, shrubs, grasses, rushes, sedges, cacti, succulents, and tropicals).
- 77 Prepare the site for planting.
- 78 Purchase plants.
- 79 Install plant materials.

Maintaining the Landscape

- 80 Identify cultural practices used in the landscaping industry.
- 81 Water landscapes.
- 82 Fertilize landscape plantings.
- 83 Describe mulching of landscape plantings.
- 84 Edge plant beds.
- 85 Prune landscape plants.
- 86 Maintain lawns.
- 87 Identify symptoms of nutritional deficiencies and toxicities of plants.
- 88 Manage pests, using Integrated Pest Management (IPM) strategies.
- 89 Apply best management practices in the landscape industry.
- 90 Explain how to store, handle, transport, and dispose of pesticides in a manner consistent with labeling, regulation and compliance, and adhering to all user safety guidelines.
- 91 Demonstrate procedures for calibrating a fertilizer spreader or injector using mathematical concepts.

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Produced by the Department of Teaching and Learning.
For further information, please call (757) 263-1070.

Notice of Non-Discrimination Policy

Virginia Beach City Public Schools does not discriminate on the basis of race, color, religion, national origin, sex, sexual orientation/gender identity, pregnancy, childbirth or related medical condition, disability, marital status, age, genetic information or veteran status in its programs, activities, employment, or enrollment, and provides equal access to the Boy Scouts and other designated youth groups. School Board policies and regulations (including, but not limited to, Policies 2-33, 4-4, 5-7, 5-19, 5-20, 5-44, 6-33, 6-7, 7-48, 7-49, 7-57 and Regulations 4-4.1, 4-4.2, 5-44.1, 7-11.1, 7-17.1 and 7-57.1) provide equal access to courses, programs, enrollment, counseling services, physical education and athletic, vocational education, instructional materials, extracurricular activities and employment.

Title IX Notice: Complaints or concerns regarding discrimination on the basis of sex or sexual harassment should be addressed to the Title IX Coordinator, at the VBCPS Office of Student Leadership, 641 Carriage Hill Road, Suite 200, Virginia Beach, 23452, (757) 263-2020, Mary.Dees@vbschools.com (student complaints) or the VBCPS Department of School Leadership, 2512 George Mason Drive, Municipal Center, Building 6, Virginia Beach, Virginia, 23456 (757) 263-1088, Elizabeth.Bryant@vbschools.com (employee complaints). Additional information regarding Virginia Beach City Public Schools' policies regarding discrimination on the basis of sex and sexual harassment, as well as the procedures for filing a formal complaint and related grievance processes, can be found in School Board Policy 5-44 and School Board Regulations 5-44.1 (students), School Board Policy 4-4 and School Board Regulation 4-4.3 (employees), and on the School Division's website at [Diversity, Equity and Inclusion/Title IX](#). Concerns about the application of [Section 504 of the Rehabilitation Act](#) should be addressed to the Section 504 Coordinator/Executive Director of Student Support Services at (757) 263-1980, 2512 George Mason Drive, Virginia Beach, Virginia, 23456 or the Section 504 Coordinator at the student's school. For students who are eligible or suspected of being eligible for special education or related services under IDEA, please contact the Office of Programs for Exceptional Children at (757) 263-2400, Plaza Annex/Family and Community Engagement Center, 641 Carriage Hill Road, Suite 200, Virginia Beach, VA 23452.

The School Division is committed to providing educational environments that are free of discrimination, harassment, and bullying. Students, staff, parents/guardians who have concerns about discrimination, harassment, or bullying should contact the school administration at their school. Promptly reporting concerns will allow the school to take appropriate actions to investigate and resolve issues. School Board Policy 5-7 addresses non-discrimination and anti-harassment, Policy 5-44 addresses sexual harassment and discrimination based on sex or gender. Policy 5-36 and its supporting regulations address other forms of harassment.

Alternative formats of this publication which may include taped, Braille, or large print materials are available upon request for individuals with disabilities. Call or write The Department of Teaching and Learning, Virginia Beach City Public Schools, 2512 George Mason Drive, P.O. Box 6038, Virginia Beach, VA 23456-0038. Telephone 263-1070 (voice); fax 263-1424; 263-1240 (TDD) or email at Brandon.Martin@vbschools.com.

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