# Scope & Sequence

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| Course Name: Landscape Design and Management **TSDS PEIMS Code:** 13001900 | | | **Course Credit:** .5  **Course Requirements:** grades 10-12.  **Prerequisites:** None. |
| **Course Description:** Landscape Design and Management is designed to develop an understanding of landscape design and management techniques and practices. To prepare for careers in horticultural systems, students must attain academic skills and knowledge, acquire technical knowledge and skills related to horticultural systems and the workplace, and develop knowledge and skills regarding career opportunities, entry requirements, and industry expectations. | | | |
| **NOTE:** This is a suggested scope and sequence for the course content. This content will work with any textbook or instructional materials. If locally adapted, make sure all TEKS are covered. | | | |
| **Total Number of Periods**  **Total Number of Minutes**  **Total Number of Hours** | 88 periods  3,960 minutes  66 hours\* | \*Schedule calculations based on 175/180 calendar days. Scope and sequence allows additional time for guest speakers, student presentations, field trips, remediation, extended learning activities, etc. | |
| **Unit Number, Title, and Brief Description** | **# of Class Periods\***  (assumes 45-minute periods)  Total minutes per unite | **TEKS Covered**  **130.21. (c) Knowledge and skills** | |
| **Unit 1: Career Exploration in the Landscape Design Industry**  Students will learn about careers in various areas in the landscape design industry, the personal skills needed to obtain one of these jobs and how skills needed for success have changed over time. Students will understand the importance of time management, the importance of effective communication and appropriate interaction in the workplace as well as understand the importance of a first impression. This unit will culminate in an experiential activity designed to allow the students to create a resume and cover letter with a job description and to participate in a mock job interview with a panel of possible employees. | 5 periods  225 minutes | (1) The student demonstrates professional standards/employability skills as required by business and industry. The student is expected to:  (A) identify career development and entrepreneurship opportunities in the field of landscape design and management;  (B) apply competencies related to resources, information, interpersonal skills, problem solving, critical thinking, and systems of operation in landscape design and management;  (C) examine licensing, certification, and credentialing requirements to maintain compliance with industry requirements;  (D) demonstrate knowledge of personal and occupational health and safety practices in the industry;  (E) identify employers' expectations and appropriate work habits; and  (F) demonstrate characteristics of good citizenship such as advocacy, stewardship, and community leadership. | |
| **Unit 2: Supervised Agricultural Experience (SAE)**    This unit, students will be able to define and describe Supervised Agricultural Experience (SAE) programs. Students will be able to explain how SAE’s are a vital part of the Agriculture Education Program by participating in local CTSO activities such as FFA as well as engage in a required SAE project. Students will be able to identify key partners in developing a successful SAE. Through involvement in an SAE, students will learn expected workplace behavior, develop specific skills within the industry, and will be given the opportunity to apply academic and occupational skills in the workplace. | 5 periods  225 minutes | (2) The student develops a supervised agriculture experience program. The student is expected to:  (A) plan, propose, conduct, document, and evaluate a supervised agriculture experience program as an experiential learning activity;  (B) apply proper record-keeping skills as they relate to the supervised agriculture experience;  (C) participate in youth leadership opportunities to create a well-rounded experience program; and  (D) produce and participate in a local program of activities using a strategic planning process. | |
| **Unit 3: Site Analysis and Design Process**    Students will learn that there are five major steps to landscape design. Two very important components, which are discussed in this unit are, site analysis and site design. Students will learn how to assess and complete a site analysis checklist to include detailed information of the site with information such as: climate, sun, exposure, slope, soil information, existing structures, utilities and easements to name a few. Students will also discover how to identify plants and other structures for specific functions, locations and environmental considerations. As a culminating activity, students will complete a site analysis on a small area either at school or at home, use computer software to generate the site sketch and create a landscape design using the design elements and principles learned in this unit. | 25 periods  1,125 minutes | (3) The student identifies environmental, aesthetic, and financial benefits of landscaped sites. The student is expected to:  (A) assess soil characteristics and environmental conditions;  (B) assess site for local conditions such as property lines, easement restrictions, and location of public utilities;  (C) complete a site analysis checklist;  (D) produce a site sketch using graphic design equipment or software;  (E) identify plants used in designing landscapes;  (F) identify structures and hardscape materials used in designing landscapes;  (G) create landscape designs demonstrating the application of design elements and principles; and  (H) analyze different landscape design styles and identify the different aesthetic and environmental factors of each style. | |
| **Unit 4: Business Procedures**  This unit introduces students to the basics of the landscape business procedures. Students will understand how to develop landscape ideas, prepare cost estimates, a material and labor sheet and schedules for landscaping services. As a culminating activity, students will gain practice in handling a variety of customer situations by participating in role-play scenarios. | 15 periods  675 minutes | (4) The student performs landscape business procedures. The student is expected to:  (A) demonstrate skills for interviewing potential clients;  (B) develop landscape ideas from a checklist;  (C) prepare cost estimates and schedules for landscaping services, including materials, labor, and business costs; and  (D) analyze service contracts. | |
| **Unit 5: Landscape Tools and Equipment**  Students will learn the most common hand tools and equipment used in the landscape industry. Specific focus will be on maintenance of hand tools and equipment as well as the costs associated with purchasing and upkeep of the equipment. Students will also gain understanding of the various irrigation systems used in the industry and the local and state regulations associated with these systems. Students will practice correct storage and maintenance of landscape equipment. | 15 periods  675 minutes | (5) The student analyzes the cost and maintenance of tools and equipment used in the landscape industry. The student is expected to:  (A) identify, store, and maintain landscaping hand tools and power equipment;  (B) analyze costs associated with purchasing and maintaining landscaping hand tools and power equipment;  (C) assess different landscape irrigation systems for efficiency, application, and environmental impact;  (D) identify common irrigation system components and materials; and  (E) examine local and state regulations affecting irrigation systems. | |
| **Unit 6: Landscape Installation**  This unit, students will participate in preparing and installing plants and structures demonstrating proper installation techniques for a site determined by the teacher or student. This may be completed as a whole group, small group, or individual assignment. The project should include: the site analysis, the design program development, the schematic diagram, plan development and project installation. The design portion may have been completed in a prior unit. Students will document their experience and present his/her final project to the class. | 10 periods  450 minutes | (6) The student performs landscape installation services. The student is expected to:  (A) prepare landscape sites for installation; and  (B) install landscape plants and structures using proper installation techniques. | |
| **Unit 7: Landscape Maintenance Services**  Students will explore business and management techniques used in the landscape maintenance industry. They will understand the importance of communication with personnel and with clients. The students will learn about seasonal schedules, irrigation systems, equipment and chemicals used in the industry and safety concerns. Students will also gain an understanding of landscape renovation and design, caring for the plants and lawn areas, pruning tips and develop fertilization schedules. As a culminating activity for this unit, students will take an existing landscape design drawing and create a spreadsheet or a record showing: clients name, plant materials on site, fertilization records, mowing schedule, Integrated Pest Management (IPM) records, watering schedule and any pertinent information as it relates to that landscape. The students will share their information with the class. | 13 periods  585 minutes | (7) The student performs landscape maintenance services. The student is expected to:  (A) identify and demonstrate proper pruning techniques for different plant materials;  (B) recognize methods for renovating existing landscapes;  (C) analyze nutritional needs of plants;  (D) develop fertilization plans that address plant needs and environmental concerns;  (E) examine Integrated Pest Management in assessing an insect, pathogen, or weed problem;  (F) use pesticide application techniques and equipment properly;  (G) explain pesticide labeling and safety data sheets; and  (H) demonstrate lawn management techniques. | |