Course Outline

Building & Construction Trade/Marketing, Sales, & Service

REVISED: February/2023

Job Title

Building and Grounds Worker

Career Pathways:

Residential and Commercial Construction Marketing Fundamentals

Industry Sectors:

Building and Construction Trades Marketing, Sales, and Service

O*NET-SOC CODE:

37-2011.00

CBEDS Title:

HVAC Systems Professional Sales

CBEDS No.:

5502 & 4122

79-75-50

Building and Grounds Worker (Fundamentals)

Credits: 5 Hours: 60

Course Description:

This competency-based course prepares trainees for entrylevel employment as school custodians, upgrades skills, and prepares employees for promotion. The competencies in this course are aligned with the California High School Academic Content Standards and the California Career Technical Education Model Curriculum Standards.

Prerequisites:

None

NOTE: For Perkins purposes this course has been designated as an **introductory** course.

It is recommended that students in the Maintenance Supervisor program complete the following courses in the given sequence: Building and Grounds Worker (Fundamentals) (79-75-50), Maintenance Supervisor: Computer Essential Practices (75-50-65), Maintenance Supervisor: Scheduling Practices (79-75-80), and Maintenance Supervisor: Supervisory Practices (79-75-85).

This course **cannot** be repeated once a student receives a Certificate of Completion.





COURSE OUTLINE COMPETENCY-BASED COMPONENTS

A course outline reflects the essential intent and content of the course described. Acceptable course outlines have six components. (Education Code Section 52506). Course outlines for all apportionment classes, including those in jails, state hospitals, and convalescent hospitals, contain the six required elements:

(EC 52504; 5CCR 10508 [b]; Adult Education Handbook for California [1977], Section 100)

COURSE OUTLINE COMPONENTS

LOCATION

GOALS AND PURPOSES Cover

The educational goals or purposes of every course are clearly stated and the class periods are devoted to instruction. The course should be broad enough in scope and should have sufficient educational worth to justify the expenditure of public funds.

The goals and purpose of a course are stated in the COURSE DESCRIPTION. Course descriptions state the major emphasis and content of a course, and are written to be understandable by a prospective student.

PERFORMANCE OBJECTIVES OR COMPETENCIES

pp. 7-12

Objectives should be delineated and described in terms of measurable results for the student and include the possible ways in which the objectives contribute to the student's acquisition of skills and competencies.

Performance Objectives are sequentially listed in the COMPETENCY-BASED COMPONENTS section of the course outline. Competency Areas are units of instruction based on related competencies. Competency Statements are competency area goals that together define the framework and purpose of a course. Competencies fall on a continuum between goals and performance objectives and denote the outcome of instruction.

Competency-based instruction tells a student before instruction what skills or knowledge they will demonstrate after instruction. Competency-based education provides instruction which enables each student to attain individual goals as measured against pre-stated standards.

Competency-based instruction provides immediate and continual repetition and In competency-based education the curriculum, instruction, and assessment share common characteristics based on clearly stated competencies. Curriculum, instruction and assessment in competency-based education are: explicit, known, agreed upon, integrated, performance oriented, and adaptive.

COURSE OUTLINE COMPETENCY-BASED COMPONENTS (continued)

COURSE OUTLINE COMPONENTS LOCATION

INSTRUCTIONAL STRATEGIES p. 14

Instructional techniques or methods could include laboratory techniques, lecture method, small-group discussion, grouping plans, and other strategies used in the classroom.

Instructional strategies for this course are listed in the TEACHING STRATEGIES AND EVALUATION section of the course outline. Instructional strategies and activities for a course should be selected so that the overall teaching approach takes into account the instructional standards of a particular program, i.e., English as a Second Language, Programs for Adults with Disabilities.

UNITS OF STUDY, WITH APPROXIMATE HOURS ALLOTTED FOR EACH UNIT

Cover

The approximate time devoted to each instructional unit within the course, as well as the total hours for the course, is indicated. The time in class is consistent with the needs of the student, and the length of the class should be that it ensures the student will learn at an optimum level.

pp. 7-12

Units of study, with approximate hours allotted for each unit are listed in the COMPETENCY AREA STATEMENT(S) of the course outline. The total hours of the course, including work-based learning hours (community classroom and cooperative vocational education) is listed on the cover of every CBE course outline. Each Competency Area listed within a CBE outline is assigned hours of instruction per unit.

EVALUATION PROCEDURES p. 14

The evaluation describes measurable evaluation criteria clearly within the reach of the student. The evaluation indicates anticipated improvement in performances as well as anticipated skills and competencies to be achieved.

Evaluation procedures are detailed in the TEACHING STRATEGIES AND EVALUATION section of the course outline. Instructors monitor students' progress on a continuing basis, assessing students on attainment of objectives identified in the course outline through a variety of formal and informal tests (applied performance procedures, observations, and simulations), paper and pencil exams, and standardized tests.

REPETITION POLICY THAT PREVENTS PERPETUATION OF STUDENT ENROLLMENT

Cover

After a student has completed all the objectives of the course, he or she should not be allowed to reenroll in the course. There is, therefore, a need for a statement about the conditions for possible repetition of a course to prevent perpetuation of students in a particular program for an indefinite period of time.

ACKNOWLEDGMENTS

Thanks to BRENDA VELA and NAZELI ZELYAN for developing and editing this curriculum. Acknowledgment is also given to ERICA ROSARIO for designing the original artwork for the course covers.

ANA MARTINEZ
Specialist
Career Technical Education

ROSARIO GALVAN
Administrator
Division of Adult and Career Education

APPROVED:

JOE STARK
Executive Director
Division of Adult and Career Education

CALIFORNIA CAREER TECHNICAL EDUCATION MODEL CURRICULUM STANDARDS

Building and Construction Trades Industry Sector Marketing, Sales, and Services Industry Sector Knowledge and Performance Anchor Standards

1.0 Academics

Analyze and apply appropriate academic standards required for successful industry sector pathway completion leading to postsecondary education and employment. Refer to the Marketing, Sales, and Services academic alignment matrix for identification of standards.

2.0 Communications

Acquire and accurately use Marketing, Sales, and Services sector terminology and protocols at the career and college readiness level for communicating effectively in oral, written, and multimedia formats.

3.0 Career Planning and Management

Integrate multiple sources of career information from diverse formats to make informed career decisions, solve problems, and manage personal career plans.

4.0 Technology

Use existing and emerging technology to investigate, research, and produce products and services, including new information, as required in the Marketing, Sales, and Services sector workplace environment.

5.0 Problem Solving and Critical Thinking

Conduct short, as well as more sustained, research to create alternative solutions to answer a question or solve a problem unique to the Marketing, Sales, and Services sector using critical and creative thinking, logical reasoning, analysis, inquiry, and problem-solving techniques.

6.0 Health and Safety

Demonstrate health and safety procedures, regulations, and personal health practices and determine the meaning of symbols, key terms, and domain-specific words and phrases as related to the Marketing, Sales, and Services sector workplace environment.

7.0 Responsibility and Flexibility

Initiate and participate in a range of collaborations demonstrating behaviors that reflect personal and professional responsibility, flexibility, and respect in the Marketing, Sales, and Services sector workplace environment and community settings.

8.0 Ethics and Legal Responsibilities

Practice professional, ethical, and legal behavior, responding thoughtfully to diverse perspectives and resolving contradictions when possible, consistent with applicable laws, regulations, and organizational norms.

9.0 Leadership and Teamwork

Work with peers to promote divergent and creative perspectives, effective leadership, group dynamics, team and individual decision making, benefits of workforce diversity, and conflict resolution as practiced in the DECA career technical student organization.

10.0 Technical Knowledge and Skills

Apply essential technical knowledge and skills common to all pathways in the Marketing, Sales, and Services sector, following procedures when carrying out experiments or performing technical tasks.

11.0 Demonstration and Application

Demonstrate and apply the knowledge and skills contained in the Marketing, Sales, and Services anchor standards, pathway standards, and performance indicators in classroom, laboratory, and workplace settings, and through the DECA career technical student organization.

Building and Construction Trades & Marketing, Sales, and Services Pathway Standards

D. Residential and Commercial Construction Pathway

The Residential and commercial Construction pathway provides learning opportunities for students interested in preparing for careers in construction and building design, performance, and sustainability. The standards focus on the manner in which residential and commercial structures are built (Class B California License).

Sample occupations associated with this pathway:

- ♦ Plumber
- ♦ Electrician
- ♦ Building Inspector
- ♦ Estimator
- ♦ Carpenter
- D1.0 Recognize the impact of financial, technical, environmental, and labor trends on the past and future of the construction industry.
- D2.0 Apply the appropriate mathematical calculations used in the construction trades.
- D3.0 Interpret and apply information from technical drawings, schedules, and specifications used in the construction trades.
- D4.0 Demonstrate techniques for proper site preparation.
- D5.0 Demonstrate foundation layout techniques to include setting forms, placing reinforcements, and placing concrete according to construction drawings, specifications, and building codes.
- D6.0 Demonstrate carpentry techniques for the construction of a single-family residence.
- D7.0 Demonstrate proper installation techniques of interior finish materials and protective finishes.
- D8.0 Demonstrate the application of exterior finish materials and protective finishes in building construction.
- D9.0 Understand, integrate, and employ sustainable construction practices in the building trades.
- D10.0 Demonstrate skills necessary to complete a plumbing system in a single-family residence in accordance with accepted industry standards.
- D11.0 Demonstrate skills necessary to complete an electrical system in a single-family residence in accordance with accepted industry standards.

A. Marketing Pathway

Use both creative and systems processes, develop marketing concepts and principles and their practical application in marketing and management. Subject matter incudes market research, economics, marketing budgets, creative development and design, and marketing foundations/functions with emphasis on public relations, advertising, branding, promotion, product/service management, pricing, and distribution. Specialized programs of study in this field may include sports marketing, hospitality marketing, advertising, or market research.

Sample occupations associated with this pathway:

- ♦ Customer Service Representative
- ♦ Retail Salesperson
- ♦ Sales Manager
- ♦ Real Estate Broker
- ♦ Fashion Buyer
- B1.0 Understand the interrelationships between economic and marketing concepts and selling.
- B2.0 Analyze and evaluate legal, moral, and ethical issues affecting selling and sales management.
- B3.0 Analyze customer/client behavior in the selling process.
- B4.0 Understand the nature and scope of the functions associated with personal and business sales strategies, product knowledge, support activities, and management of selling techniques.
- B5.0 Examine different types of sales pathways.
- B6.0 Analyze the support activities of sales staff and management.
- B7.0 Complete a strategic plan that includes establishing individual and company sales goals to guide the activities of the sales staff.
- B8.0 Access and use marketing information to enhance sales opportunities and activities.

CBE Competency-Based Education

COMPETENCY-BASED COMPONENTS for the <u>Building and Grounds Worker (Fundamentals)</u> Course

	COMPETENCY AREAS AND STATEMENTS	MINIMAL COMPETENCIES	STANDARDS
	ORIENTATION Understand, apply, and evaluate classroom and workplace policies procedures.	 Describe the scope and purpose of the course. Describe professionalism as it relates to the custodial building and grounds maintenance worker. Describe duties of the custodial building and grounds maintenance worker. Describe duties of the custodial building and grounds maintenance worker with regard to health and safety issues. Describe terms used by the custodial worker. Demonstrate proper flag etiquette for United States and Californi flags. 	1, 2, 7, 8, 10 CTE Anchor: Academics: 1.0 Communications:
(6 hc	ours)		A3.3, D1.2
1	SAFETY REGULATIONS Understand, apply, and evaluate safety rules pertaining to chemicals, Occupational Safety and Health Administration (OSHA) and the Material Safety Data Sheets (MSDS).	 Describe workplace safety rules for chemical use. Describe the OSHA regulations that pertain to building and grounds maintenance. Describe the safety guidelines as listed on an MSDS form. Explain the pH scale and its relevance to chemicals. 	Career Ready Practice: 1, 2, 8 CTE Anchor: Academics: 1.0 Communications: 2.4 Health and Safety: 6.1, 6.2, 6.3, 6.4, 6.5, 6.6, 6.7 Ethics and Legal Responsibilities: 8.2

COMPETENCY AREAS AND STATEMENTS	MINIMAL COMPETENCIES	STANDARDS
(3 hours)		CTE Pathway: A1.2, D1.2
C. SAFETY PROCEDURES Understand, apply, and evaluate workplace safety procedures.	 Explain laws regarding personal safety listed in the handbook. Identify various hazardous conditions. Use a ladder safely. Perform proper lifting techniques. Demonstrate proper use of fire extinguishers. Demonstrate the ability to operate fire sprinkler valves and alarm systems and the building grounds worker (BGW) responsibilities in case of fire. Describe the proper procedure for disposal of blood pathogens and hazardous waste. Describe procedures to ensure electrical safety. Pass the designated safety test with 100% accuracy. 	Career Ready Practice: 1, 2, 10 CTE Anchor: Academics: 1.0 Communications: 2.3, 2.4 Health and Safety: 6.2, 6.3, 6.4, 6.5, 6.6, 6.7 Technical Knowledge and Skills: 10.1 Demonstration and Application: 11.1 CTE Pathway: A1.2, D4.6
D. GROUNDS, YARD, AND LAWN CARE Understand, apply, and evaluate the techniques for operating various types of power yard and lawn equipment according to acceptable, approved standards.	 Operate a power vacuum yard sweeper. Review methods of removing weeds from paved and unplanted areas. Review proper pruning methods for trees and plants. Operate a 21-inch rotary power lawnmower. Operate a power lawn edger. Operate a power weed cutter/trimmer. Operate a power yard blower. Demonstrate proper maintenance and care of tools and equipment. 	Career Ready Practice: 1, 10 CTE Anchor: Academics: 1.0 Health and Safety: 6.3, 6.6 Demonstration and Application: 11.1 CTE Pathway: A1.2, D4.6
E. REGULAR HARD FLOOR MAINTENANCE	 Identify various resilient and non-resilient floor compositions. Sweep floors using dust mop and floor brush. Identify various categories of floor cleaning chemicals. 	Career Ready Practice: 1, 2, 10

COMPETENCY AREAS AND STATEMENTS	MINIMAL COMPETENCIES	STANDARDS
Understand, apply, and evaluate the techniques for the daily/weekly maintenance of floor surfaces according to acceptable, approved standards. (8 hours)	 Identify and explain proper use and dilution of floor cleaning chemicals. Perform wet mop, damp mop, and spot mop cleaning of floors. Demonstrate spray buffing and burnishing of floors. Demonstrate proper care and use of tools. Identify other duties involved in the sweeping process. 	CTE Anchor: Academics: 1.0 Communications: 2.3 Health and Safety: 6.3, 6.4, 6.6 Demonstration and Application: 11.1 CTE Pathway: A1.2, D2.3
F. FLOOR CARE (PROJECT CLEANING) Understand, apply, and evaluate the techniques for the project cleaning of hard floor surfaces with available supplies and equipment according to acceptable, approved standards.	 Describe and demonstrate proper chemical dilution ratios of floor stripping chemicals. Demonstrate proper use of floor stripping chemicals. Identify floor types as resilient, non-resilient, and wood. Scrub and strip floors. Apply floor finishes. Perform spray buffing and high speed burnishing. Describe wood floor screening and sealing of hard wood floors. 	Career Ready Practice: 1, 2, 10 CTE Anchor: Academics: 1.0 Communications: 2.3, 2.4 Health and Safety: 6.3, 6.7 Demonstration and Application: 11.1 CTE Pathway: A1.2, D2.1, D2.3,
G. CARPET MAINTENANCE Understand, apply, and evaluate the techniques for maintaining carpeting materials on a daily/weekly basis according to acceptable, approved standards.	 Identify carpet types. Vacuum carpets. Demonstrate proper chemical dilution ratios for carpet care. Remove spots and stains. Demonstrate proper care and use of tools. 	Career Ready Practice: 1, 2, 10 CTE Anchor: Academics: 1.0 Communications: 2.3, 2.4 Health and Safety: 6.1, 6.3, 6.4, 6.7 Demonstration and Application: 11.1

	COMPETENCY AREAS AND STATEMENTS	MINIMAL COMPETENCIES	STANDARDS
(3	hours)		CTE Pathway: A1.2, D2.3
н.	CARPET CARE (PROJECT CLEANING) Understand, apply, and evaluate the techniques for cleaning carpets with available equipment according to acceptable, approved standards.	 Identify and explain proper use of carpet cleaning chemicals. Identify and explain dilution of carpet cleaning chemicals. Demonstrate carpet cleaning methods, such as dry foam, rotary machine, soil extraction, bonnet method, and spray method. Demonstrate traffic lane cleaning. Demonstrate proper care and use of carpet cleaning equipment. 	Career Ready Practice: 1, 2, 10 CTE Anchor: Academics: 1.0 Communications: 2.3, 2.4 Health and Safety: 6.1, 6.3, 6.4, 6.7 Demonstration and Application: 11.1
(3	hours)		CTE Pathway: A1.2, D2.3, D7.5
I.	DUSTING, WALL CARE, AND GLASS CLEANING Understand, apply, and evaluate the techniques for dusting furniture, washing walls, and cleaning glass according to acceptable, approved standards.	 Explain the importance of dusting. Identify cloths, mops, and special tools used to perform routine dusting. Differentiate between dry and damp dusting. Determine how often dusting must be done. Perform low dusting. Perform high dusting. Demonstrate hand method of wall washing. Spot wash walls and woodwork. Wash Venetian blinds and furniture. Clean interior and exterior glass. 	Career Ready Practice: 1, 2, 10 CTE Anchor: Academics: 1.0 Communications: 2.3, 2.4 Health and Safety: 6.3, 6.6, 6.7 Demonstration and Application: 11.1
(6	hours)		CTE Pathway: A1.2, D2.3
J.	SANITARY FACILITIES Understand, apply, and evaluate the techniques for cleaning and disinfecting restrooms, restroom fixtures, and other sanitary facilities	 Identify and explain proper use of carpet cleaning chemicals. Describe the importance of infection control. Describe the restroom routine, listing order of performance. Describe and demonstrate the techniques for cleaning and disinfecting the following: toilet bowls, urinals, and all restroom surfaces sinks and drinking fountains 	Career Ready Practice: 1, 2, 5, 7, 10 CTE Anchor: Academics: 1.0

COMPETENCY AREAS AND STATEMENTS			MINIMAL COMPETENCIES	STANDARDS
according to approved sta		5.	c. shower and locker rooms Describe and demonstrate the techniques for deep cleaning restrooms, showers, and locker rooms.	Communications: 2.3, 2.4 Problem Solving and Critical Thinking: 5.2, 5.4 Health and Safety: 6.1, 6.2, 6.3, 6.4, 6.6, 6.7 Responsibility and Flexibility: 7.2, 7.3, 7.4 Demonstration and Application: 11.1 CTE Pathway: A1.2, D2.3
	apply, and techniques for d maintaining	1. 2. 3. 4. 5. 6. 7. 8. 9.	Identify the traditional and internet sources for job openings in the building and grounds maintenance field. Describe and demonstrate the accurate completion of an employment application. Describe and demonstrate the writing of a cover letter and résumé. Describe and demonstrate the preparatory procedures for an effective interview. Role-play an interview. List the qualities needed to maintain employment. List the proper procedures for exiting a job. Describe customer service as a method of building permanent relationships between the organization and the customer. Describe entrepreneurial opportunities in the building and grounds maintenance field.	Career Ready Practice: 1, 2, 3, 4, 5, 7, 8, 9, 10 CTE Anchor: Academics: 1.0 Communications: 2.3, 2.4, 2.5 Career Planning and Management: 3.1, 3.2, 3.3, 3.4, 3.5, 3.6 Technology: 4.1 Problem Solving and Critical Thinking: 5.1, 5.2, 5.4 Responsibility and Flexibility: 7.3, 7.4, 7.7 Ethics and Legal Responsibilities: 8.4, 8.5 Leadership and Teamwork: 9.2, 9.3

COMPETENCY AREAS AND STATEMENTS	MINIMAL COMPETENCIES	STANDARDS
		Demonstration and Application: 11.1
(6 hours)		CTE Pathway: A3.3, A7.1, D1.1

SUGGESTED INSTRUCTIONAL MATERIALS and OTHER RESOURCES

TEXTBOOKS

Friedman, Edwin B. <u>Housekeeping Handbook for Institutions, Business and Industry</u>. NY: Fredrick Fell Publishers, Inc., Latest Edition.

Los Angeles Unified School District. Maintenance and Operations Branch Custodial Manual.

Los Angeles Unified School District. Personal Safety Handbook.

Sack, Thomas F. A Complete Guide to Building and Plant Maintenance. Prentice Hall, Latest Edition.

MULTI-MEDIA

"Back Lifting Program." (video) Los Angeles Unified School District.

The Audiovisual Media Library produces publications and a web page on the LAUSD.net of videocassettes, films, videodiscs, and building level materials such as audiovisuals and software which schools may wish to consider for purchase. For videocassettes, compact discs, DVDs, video streaming, call LAUSD Senior Audiovisual Media Technician: 213-207-2231.

"Floor Stripping Procedures." Maintenance/Operations Branch, Los Angeles Unified School District.

Videos from Environmental Health and Safety Branch, Business Services Division, Los Angeles Unified School District.

VIDEOS

Maintenance & Operations Branch, LAUSD

Ladder Safety (video)
Wood Floor Care (video)
Restroom Cleaning (video)
Landscaping
Carpet Care
Resilient Floor Care

Environmental Health and Safety Branch, LAUSD It Only Takes a Second (video)

Nursing Branch, LAUSD

Bloodborne Pathogens (video)

RESOURCES

Employer Advisory Board members

CDE Model Curriculum Standards for Marketing, Sales, and Services http://www.cde.ca.gov/ci/ct/sf/documents/mktsalesservices.pdf

COMPETENCY CHECKLIST

TEACHING STRATEGIES and EVALUATION

METHODS AND PROCEDURES

- A. Demonstration/observation
- B. Individualized instruction
- C. Multimedia presentations
- D. Small group instruction

EVALUATION

SECTION A - Orientation - Pass all assignments and exams on orientation with a minimum score of 80% or higher.

SECTION B – Safety Regulations – Pass all assignments and exams on safety regulations with a minimum score of 80% or higher.

SECTION C – Safety Procedures – Pass the designated safety test with a score of 100%.

SECTION D – Ground, Yard, and Lawn Care– Pass all assignments and exams on grounds, yard, and lawn care with a minimum score of 80% or higher.

SECTION E – Regular Hard Floor Maintenance – Pass all assignments and exams on regular hard-floor maintenance with a minimum score of 80% or higher.

SECTION F – Floor Care (Project Cleaning) – Pass all assignments and exams on floor care (project cleaning) with a minimum score of 80% or higher.

SECTION G – Carpet Maintenance – Pass all assignments and exams on carpet maintenance with a minimum score of 80% or higher.

SECTION H – Carpet Care (Project Cleaning) – Pass all assignments and exams on carpet care (project cleaning) with a minimum score of 80% or higher.

SECTION I – Dusting, Wall Care, and Glass Cleaning – Pass all assignments and exams on dusting, wall care, and glass cleaning with a minimum score of 80% or higher.

SECTION J – Sanitary Facilities – Pass all assignments and exams on sanitary facilities with a minimum score of 80% or higher.

SECTION K— Employability Skills — Pass all assignments and exams on employability skills with a minimum score of 80% or higher.

Statement for Civil Rights
All educational and vocational opportunities are offered without regard to race, color, national origin, gender, or physical disability.