

Course Outline

Building & Construction Trades/Marketing, Sales, & Service

REVISED: February/2023

Job Title

Maintenance Supervisor

Career Pathway:

Residential and Commercial
Construction
Professional Sales

Industry Sector:

Building & Construction Trades
Marketing, Sales, and Service

O*NET-SOC CODE:

49-1011.00

CBEDS Title:

Residential and Commercial
Construction
Professional Sales

CBEDS No.:

5502 & 4130

79-75-80

Maintenance Supervisor: Scheduling Practices

Credits: 5

Hours: 60

Course Description:

This competency-based course prepares trainees for entry-level supervision positions as school custodian supervisors. Instruction includes practical training in the management of custodial personnel; in-depth study of time and motion studies; scheduling work loads equitably; scheduling of routine cleaning; scheduling of nonroutine cleaning. 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 **concentrator/capstone** 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

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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

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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

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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.

B. Professional Sales Pathway

Develop knowledge and skills in the theory and practice of sales designed to provide a professional foundation to those involved in personal selling careers, including the fundamentals of personal selling with an emphasis on customer behavior, persuasive presentation of ideas, products, and services, and developing sales goals.

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 Maintenance Supervisor: Scheduling Practices Course

COMPETENCY AREAS AND STATEMENTS	MINIMAL COMPETENCIES	STANDARDS
<p>A. ORIENTATION</p> <p>Identify the duties of a maintenance supervisor as it relates to scheduling maintenance tasks.</p> <p>(6 hours)</p>	<ol style="list-style-type: none"> 1. Understand values of a good work schedule. 2. Interpret and briefly explain the components of maintenance labor allotments. 	<p>Career Ready Practice: 1, 2, 3, 5, 7</p> <p>CTE Anchor: Academics: 1.0 Communications: 2.2, 2.3 Career Planning and Management: 3.2 Problem Solving and Critical Thinking: 5.1 Responsibility and Flexibility: 7.2, 7.4 Technical Knowledge and Skills: 10.2</p> <p>CTE Pathway: B3.3, B3.6, B7.2, D2.3</p>
<p>B. SCHEDULING FREQUENCIES OF CLEANING TASKS</p> <p>Identify cleaning tasks to be scheduled and frequency to be performed.</p>	<ol style="list-style-type: none"> 1. Identify daily tasks. 2. Identify weekly tasks. 3. Identify monthly tasks. 4. Identify semi-annual and annual tasks. 5. Identify cleaning and gardening priorities to consider when adjusting tasks and task frequencies to match available maintenance hours. 	<p>Career Ready Practice: 1, 2, 5, 7, 9</p> <p>CTE Anchor: Academics: 1.0 Communications: 2.5</p>

COMPETENCY AREAS AND STATEMENTS	MINIMAL COMPETENCIES	STANDARDS
(3 hours)		Problem Solving and Critical Thinking: 5.3 Responsibility and Flexibility: 7.2, 7.3, 7.4, 7.6 Leadership and Teamwork: 9.2 CTE Pathway: B3.6, B6.1, B8.5, D2.3, D7.5
C. CLEANING STANDARDS Identify basic characteristics of acceptable cleaning standards.	<ol style="list-style-type: none"> 1. Interpret and briefly explain the cleaning standards for all areas, i.e., restrooms, classrooms, hallways, offices, auditorium, gymnasium, facilities, exterior walkways, and grounds, etc. 2. Interpret and briefly explain the proper use of acceptable cleaning time/task standards. 	Career Ready Practice: 1, 2, 5, 9, 12 CTE Anchor: Academics: 1.0 Communications: 2.3 Problem Solving and Critical Thinking: 5.3 Health and Safety: 6.3, 6.4, 6.6 Leadership and Teamwork: 9.3 Technical Knowledge and Skills: 10.2 CTE Pathway: B3.6, B7.2, D1.2, D2.3, D7.5, D7.6
D. TIME AND MOTION STUDIES / FULL SURFACE INVENTORY / WORK TIME SURVEY Identify basic characteristics of time and motion efficiencies.	<ol style="list-style-type: none"> 1. Demonstrate ability to organize and prepare a Full Survey Inventory for an elementary and secondary school assignment. 2. Demonstrate proper adjustments to tasks performed to reflect available staffing. 3. Interpret and briefly explain the Custodial Work Time Survey and Full Surface Inventory. 	Career Ready Practice: 1, 2, 5, 7, 8, 9, 10 CTE Anchor: Academics: 1.0

COMPETENCY AREAS AND STATEMENTS	MINIMAL COMPETENCIES	STANDARDS
(12 hours)	4. Demonstrate proper assignment of duties as it relates to frequency of tasks.	<p>Communications: 2.3, 2.4</p> <p>Problem Solving and Critical Thinking: 5.1, 5.2, 5.3, 5.4</p> <p>Responsibility and Flexibility: 7.2, 7.3</p> <p>Ethics and Legal Responsibilities: 8.1</p> <p>Leadership and Teamwork: 9.1, 9.2</p> <p>Technical Knowledge and Skills: 10.1</p> <p>Demonstration and Application: 11.1</p> <p>CTE Pathway: B3.4, B3.6, B6.1, D2.3</p>
<p>E. CUSTODIAL WORK SCHEDULES</p> <p>Write custodial work schedules according to acceptable standards.</p>	<ol style="list-style-type: none"> 1. Demonstrate ability to organize and write custodial work schedules using acceptable techniques and methods for all types for all types of school assignments. 2. Design a work routine for an elementary or secondary school assignment. 3. Prepare a contingent work schedule. 	<p>Career Ready Practice: 1, 2, 5, 7, 10, 11</p> <p>CTE Anchor:</p> <p>Academics: 1.0</p> <p>Communications: 2.5</p> <p>Problem Solving and Critical Thinking: 5.1, 5.3</p> <p>Health and Safety: 6.2</p> <p>Responsibility and Flexibility: 7.4</p> <p>Technical Knowledge and Skills: 10.2, 10.3</p>

COMPETENCY AREAS AND STATEMENTS	MINIMAL COMPETENCIES	STANDARDS
(12 hours)		Demonstration and Application: 11.1 CTE Pathway: B3.6, B7.2, B8.5, D2.3
F. WORK-TIME SURVEYS AND MAINTENANCE WORK SCHEDULES Write work routines and custodial schedules for an elementary school with a minimum of twelve (12) daily custodial labor hours assigned according to acceptable procedures. (12 hours)	1. Interpret and explain the difference between custodial hours allocated and actual hours available for cleaning tasks.	Career Ready Practice: 1, 2, 5, 7 CTE Anchor: Academics: 1.0 Communications: 2.3 Problem Solving and Critical Thinking: 5.2 Responsibility and Flexibility: 7.4 CTE Pathway: B3.6, D1.2
G. SCHEDULING RECESS, ANNUAL, AND YEAR-ROUND CLEANING Write custodial schedules for recess, annual clean-up periods, and year-round cleaning according to acceptable procedures.	1. Identify total labor hours available for a specific school plant to perform recess, annual, and year-round cleaning tasks. 2. Identify tasks to be performed during recess, annual, and year-round cleaning periods. 3. Use cleaning time standards to determine time for each task.	Career Ready Practice: 1, 5, 7 CTE Anchor: Academics: 1.0 Problem Solving and Critical Thinking: 5.2, 5.3 Health and Safety: 6.2, 6.3 Responsibility and Flexibility: 7.2, 7.3, 7.4 Technical Knowledge and Skills: 10.3

COMPETENCY AREAS AND STATEMENTS	MINIMAL COMPETENCIES	STANDARDS
(3 hours)		CTE Pathway: B3.3, B3.6, D2.3
<p>H. IMPLEMENTATION OF CUSTODIAL WORK</p> <p>Identify supervision skills necessary to implement work schedules successfully.</p> <p>(3 hours)</p>	<ol style="list-style-type: none"> 1. Demonstrate the understanding of personal fatigue and delay factors, skill level, and the human element involved when equally distributing the workload. 2. Identify emergency situations such as absenteeism, vacations, etc., as they relate to implementing maintenance work schedules. 	<p>Career Ready Practice: 1, 2, 3, 5, 6, 7, 8, 9, 10</p> <p>CTE Anchor: Academics: 1.0 Communications: 2.3 Career Planning and Management: 3.2 Problem Solving and Critical Thinking: 5.1, 5.2, 5.3, 5.4 Health and Safety: 6.2 Responsibility and Flexibility: 7.2, 7.3, 7.4 Ethics and Legal Responsibilities: 8.4, 8.5 Leadership and Teamwork: 9.2 Technical Knowledge and Skills: 10.5 Demonstration and Application: 11.1</p> <p>CTE Pathway: B2.4, B3.6, B7.2, D1.2</p>
<p>I. REVIEW AND EVALUATION</p> <p>Review and be examined on competency areas.</p>	<ol style="list-style-type: none"> 1. Demonstrate ability to prepare a full-time and part-time custodial work time survey and write a maintenance work schedule from a given data including time for set-up and put away, breaks, lunch, etc. 	<p>Career Ready Practice: 1, 2, 3, 5, 7, 10, 11</p>

COMPETENCY AREAS AND STATEMENTS	MINIMAL COMPETENCIES	STANDARDS
(6 hours)		<p>CTE Anchor: Academics: 1.0 Communications: 2.1, 2.2, 2.4 Career Planning and Management: 3.1 Problem Solving and Critical Thinking: 5.1 Responsibility and Flexibility: 7.2, 7.4, 7.5 Technical Knowledge and Skills: 10.5 Demonstration and Application: 11.1, 11.2</p> <p>CTE Pathway: B2.1, B2.4, B3.6, D2.3</p>

SUGGESTED INSTRUCTIONAL MATERIALS and OTHER RESOURCES

TEXTBOOKS

Los Angeles Unified School District, [Preparation Instructions for Custodian Work Schedules.](#)

RESOURCES

Employer Advisory Board members

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

COMPETENCY CHECKLIST

TEACHING STRATEGIES and EVALUATION

METHODS AND PROCEDURES

- A. Lectures
- B. Demonstration/observation
- C. Boiler room practice
- D. Field trips
- E. Individualized instruction

EVALUATION

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

SECTION B – Scheduling Frequencies of Cleaning Tasks– Pass all assignments and exams on scheduling frequencies of cleaning tasks with a minimum score of 80% or higher.

SECTION C – Cleaning Standards – Pass all assignments and exams on cleaning standards with a minimum score of 80% or higher.

SECTION D – Time and Motion Studies / Full Surface Inventory / Work-Time Survey – Pass all assignments and exams on time and motion studies / full surface inventory / work-time surveys with a minimum score of 80% or higher.

SECTION E – Custodial Work Schedules – Pass all assignments and exams on custodial work schedules with a minimum score of 80% or higher.

SECTION F – Work-Time Surveys and Maintenance Work Schedules – Pass all assignments and exams on work-time surveys and maintenance work schedules with a minimum score of 80% or higher.

SECTION G – Scheduling Recess, Annual, and Year-Round Cleaning – Pass all assignments and exams on scheduling recess, annual, and year-round cleaning with a minimum score of 80% or higher.

SECTION H – Implementation of Custodial Work – Pass all assignments and exams on implementation of custodial work with a minimum score of 80% or higher.

SECTION I – Review and Evaluation – Pass all assignments and exams on review and evaluation 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.
