

**SAN DIEGO COMMUNITY COLLEGE DISTRICT  
MIRAMAR COLLEGE  
ASSOCIATE DEGREE COURSE OUTLINE**

**SECTION I****SUBJECT AREA AND COURSE NUMBER:** Diesel Technology 090**COURSE TITLE:** Forklift Operation**Units: 1**  
Grade Only**CATALOG COURSE DESCRIPTION:**

Students learn the classroom theory and principles and operational instruction in general forklift safety, use and operation of forklifts, handling loads, preventive maintenance and upkeep, identification of operational problems and preparation and testing for OSHA Forklift Certification.

**REQUISITES:****Advisory:**

ENGL 049 with a grade of "C" or better, or equivalent or Assessment Skill Level W5  
&  
ENGL 048 with a grade of "C" or better, or equivalent or Assessment Skill Level R5

**FIELD TRIP REQUIREMENTS:** May be required**TRANSFER APPLICABILITY:** Associate Degree Credit only and not Transferable**TOTAL LECTURE HOURS:** 8 - 9**TOTAL LAB HOURS:** 24 - 27**STUDENT LEARNING OBJECTIVES:**

Upon successful completion of the course the student will be able to:

1. Apply and demonstrate proper OSHA safety practices when operating forklift.
2. Describe the OSHA Certification Standards for forklift operation.
3. Describe or demonstrate safe refueling procedures for diesel powered forklifts.
4. Describe or demonstrate safe refueling procedures for LPG powered forklifts.
5. Describe or demonstrate safe refueling procedures for gasoline powered forklifts.
6. Describe or demonstrate safe charging procedures for electric forklifts
7. Describe the proper use of the hydraulic lift control; and demonstrate the manipulative skills necessary for their correct use.
8. Describe the proper use of the hydraulic tilt control; and demonstrate the manipulative skills necessary for their correct use.
9. Demonstrate the ability to perform pre-operation inspection of forklift and identify and describe mechanical problems.
10. Demonstrate the ability to perform pre-operation inspection of forklift and identify and describe mechanical problems.
11. Demonstrate the ability to locate the forklifts identification plate and interpret this data.
12. Describe the proper operation of a forklift when traveling; demonstrate the manipulative skills necessary for this task.

13. Describe the proper operation of a forklift when negotiating a skills course; demonstrate the manipulative skills necessary for this task.
14. Describe the proper operation of a forklift when handling loads; demonstrate the manipulative skills necessary for this task.
15. Describe the proper operation of a forklift when negotiating an incline; demonstrate the manipulative skills necessary for this task.
16. Demonstrate the ability to identify key forklift components; and describe their function.
17. Describe different classification and types of forklifts and their uses.

## **SECTION II**

### **1. COURSE OUTLINE AND SCOPE:**

#### **A. Outline Of Topics:**

The following topics are included in the framework of the course but are not intended as limits on content. The order of presentation and relative emphasis will vary with each instructor.

- I. Forklift Safety
  - A. OSHA
  - B. Accidents
  - C. Reports
- II. Certification standards
  - A. Purpose
  - B. Types
- III. Diesel refueling
  - A. Safety
  - B. Procedure
- IV. LPG refueling
  - A. Safety
  - B. Procedure
- V. Gasoline refueling
  - A. Safety
  - B. Procedure
- VI. Electric charging
  - A. Safety
  - B. Procedure
- VII. Lift controls
  - A. Function
  - B. Uses
  - C. Manipulation
- VIII. Tilt controls
  - A. Function
  - B. Uses
  - C. Manipulation
- IX. Pre-operation inspection
  - A. Purpose
  - B. Procedure
  - C. Report
- X. Identification plate
  - A. Purpose
  - B. Location
  - C. Reading
- XI. Forklift operation
  - A. Forward
  - B. Reverse
- XII. Skills course
  - A. Forward
  - B. Reverse
- XIII. Load handling

- A. Lifting
- B. Lowering
- C. Traveling
- XIV. Incline operation
  - A. Forward
  - B. Reverse
- XV. Component identification
  - A. Purpose
  - B. Location
  - C. Defination
- XVI. Forklift classification
  - A. Purpose
  - B. Types
  - C. Uses

**B. Reading Assignments:**

Reading assignments are required and may include but, are not limited to, the following:

- I. 1. The Professional Lift Truck Operator's Guide
- II. 2. Federal, State and Local forklift regulations
- III. 3. Supplemental materials such as manufacturers' catalogs, or manuals.
- IV. 4. Articles related to forklift operation in professional
- V. journals such as Diesel Progress, Commercial Carrier
- VI. Journal, Utility Fleet, Fleet Owner, and Transportation
- VII. News

**C. Appropriate Assignments that Demonstrate Critical Thinking:**

Critical thinking assignments are required and may include, but are not limited to, the following:

- I. 1. Demonstrate safe handling procedures for assigned loads
- II. 2. Demonstrate proper operation of forklift
- III. 3. Demonstrate safe fuel handling procedures when refueling
- IV. a forklift.

**D. Appropriate Outside Assignments:**

Outside assignments may include, but are not limited to, the following:

- I. 1. Using reference materials to review a given topic, such as job safety
- II. 2. Using reference materials to review types of forklifts and their uses
- III. 3. Reviewing and answering questions at the end of each module.

**E. Writing Assignments:**

Writing assignments are required and may include, but are not limited to, the following:

- I. 1. Explaining the steps to be followed in case of a tip-over
- II. 2. Comparing types of forklifts and their uses
- III. 3. Listing factors that effect lift truck balance and stability

**2. METHODS OF EVALUATION:**

A student's grade will be based on multiple measures of performance unless the course requires no grade. Multiple measures may include, but are not limited to, the following:

- I. 1. Performing manipulative skills as needed to complete
- II. laboratory assignments satisfactorily
- III. 2. Successfully applying theory to laboratory assignments
- IV. 3. Performing of written, and/or practical examinations
- V. 4. Performing forklift operations according to OSHA forklift

- VI. safety policies
- VII. 5. Contributing to class discussion
- VIII. 6. Maintaining attendance per current policy.

### **3. METHODS OF INSTRUCTION:**

Methods of instruction may include, but are not limited to, the following:

- \* Lecture
- \* Laboratory
- \* Lecture-Lab Combination
- \* Other (Specify)
  - \* 1. Field trips
  - \* 2. Guest speakers

### **4. REQUIRED TEXTS AND SUPPLIES:**

Textbooks may include, but are not limited to:

#### **TEXTBOOKS:**

1. The Professional Lift Truck Operator's Guide, Current ed. J.J. Keller & Associates, Inc., 1999, ISBN: 1579436757

#### **MANUALS:**

1. Cal/ OSHA. Operating Rules for Industrial Trucks, Cal/ OSHA, 02-02-1999

#### **PERIODICALS:**

#### **SOFTWARE:**

#### **SUPPLIES:**

1. 1. Safety glasses
2. 2. Appropriate clothing and footwear for outside shop work.
3. 3. Ear plugs.

**ORIGINATOR:** Lois Bruhn

**ORIGINATION DATE:** 02/05/1999

**PROPOSAL ORIGINATOR:** James Cargill

**CO-CONTRIBUTOR(S)**

**PROPOSAL DATE:** 06/08/2004