San Bernardino Valley College

Curriculum Approved: September 16, 2002

Last Updated: September 2000

## I. COURSE DESCRIPTION:

A. Department Information:

Division: Technical
Department: Transportation
Course ID: WAREHS 021

Course Title: Forklift Operation and Certification

Units:

Lecture: 0.5 Hour Laboratory: 1.5 Hours Prerequisite: None

# B. Catalog Description:

This course provides the student with training in forklift and other industrial powered trucks typically used in the warehousing and distribution industries. Training covers operation, inspection, basic maintenance and safety. Training is provided in accordance with CalOSHA standards, and upon successful completion of the course, the student will receive certification in accordance with CalOSHA to operate forklifts.

### C. Schedule Description:

This course provides the student with training in forklift and other industrial powered trucks typically used in the warehousing and distribution industries. Training is provided in accordance with CalOSHA standards, and upon successful completion of the course, the student will receive certification in accordance with CalOSHA to operate a variety of forklift equipment.

### II. NUMBER OF TIMES COURSE MAY BE TAKEN FOR CREDIT: One

#### III. EXPECTED OUTCOMES FOR STUDENTS:

Upon completion of the course, students will be able to:

- A. Interpret OSHA standards as they pertain to forklift operations
- B. Compare and contrast similarities and differences from automobiles
- C. Distinguish and operate controls and instrumentation
- D. Compare the functions to be performed in power plant operation and maintenance
- E. Distinguish and compare the types of material handling equipment
- F. Safely steer, stop and maneuver material handling equipment
- G. Examine fork and attachment adaptation, operation and limitations
- H. Categorize steps in vehicle inspection, maintenance, refueling, charging, recharging batteries and operating limitations all in accordance with calOSHA and OEM standards
- Demonstrate safe driving techniques and operation in accordance with current calOSHA standards.

#### IV. CONTENT:

- A. calOSHA Standards
  - 1. Operating instructions
  - 2. Similarities to and differences from automobiles
  - 3. Controls and instrumentation
  - 4. Power plant operation and maintenance
  - 5. Steering and maneuvering
  - 6. Visibility
  - 7. Fork and attachment adaptation operation and limitations
  - 8. Vehicle capacity
  - 9. Vehicle stability
  - 10. Vehicle inspection and maintenance
  - 11. Refueling or charging and recharging batteries

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- 12. Operating limitations
- 13. Any other warnings or precautions specific to the units involved
- **B. PRE-OPERATION** 
  - 1. Classes of Forklifts.
  - 2. Types of Forklifts
  - 3. Comparing Forklifts VS. Automobiles
  - 4. Identification Plates.
  - 5. Pre-Operational Inspection
- C. OPERATIONS
  - 1. Basic safety rules
  - 2. Loading and unloading trailers.
  - 3. Rough, uneven or sloped surfaces
  - 4. Traveling in hazardous areas
  - 5. Maneuvering in narrow aisles
  - 6. Selecting the equipment
  - 7. Load Handling
- D. FUELING THE UNIT
  - 1. Propane
  - 2. Gasoline or Diesel
  - 3. Batteries
  - 4. Changing a Battery
  - 5. Charging the Battery
- E. SPECIAL UNITS
  - 1. High lifts / Order Pickers
  - 2. Hand Trucks / Pallet Trucks
  - 3. Low Lift Trucks
- D. HANDS ON TRAINING (ROAD TEST).

## V. METHODS OF INSTRUCTION:

- A. Lecture
- B. Reading of the text and other resources
- C. Discussion
- D. Video
- E. Demonstration
- F. Practice

# VI. TYPICAL ASSIGNMENTS:

- A. Read text and other resources; read the daily inspection requirements of the calOSHA Powered Industrial Truck standard
- B. Class discussion; what safety issues exist in using special fork attachments?
- C. Written homework assigned each week from the questions and problems in each chapter. Typical Questions:
  - There are how many types of MHE
    - a) ten
    - b) five
    - c) many
  - 2. Draw a forklift layout depicting the center of gravity of the vehicle and maximum load.
- D. Road tests, load handling, and vehicle inspections at the later portions of the course.

### VII. EVALUATION(S):

- A. Methods of evaluation
  - 1. Class participation, and timely attendance.

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- a) Since this course has an objective of preparing students to be ready to enter the distribution center workforce, each student will keep a time card, punch a time clock, and submit it at the last class.
- b) Students shall be subjectively evaluated on their frequency and quality of participation in class discussions
- 2. Objective and subjective examinations, typical questions:
  - a) List three types of MHE used in the warehouse
  - b) Explain the use of the order picker
- 3. Road tests.
- B. Frequency of evaluation shall include at a minimum:
  - 1. On time attendance at each class and lab session
  - 2. One pre-test
  - 3. One final exam
  - 4. One final road test

## VIII. TYPICAL TEXT(S):

Employee's Guide to Forklift Safety (tel-A-Train's Safety Training) by Inc Staff Tel-A-Train. CalOSHA standard for powered industrial trucks.

IX. OTHER SUPPLIES REQUIRED OF STUDENT: Protective Shoes