

CONSTRUCTION WORK/1 (180 Hours)

Course No.: 71-35-50

COMPETENCY CHECKLIST

Student Name _____

Teacher Name _____ School Site _____

Start Date _____ Completion Date _____ Certificate Date _____

Teacher Signature _____ Student Signature _____

(Signatures verify completion of course competencies)

A. ORIENTATION AND SAFETY (5 hrs)

- _____ 1. Scope and purpose of course
- _____ 2. Course content as part of Linked Learning
- _____ 3. Classroom policies and procedures
- _____ 4. Class/workplace emergency procedures
- _____ 5. Jobs in industry for construction workers
- _____ 6. Opportunities for gender equity/non-trad
- _____ 7. Impact of EPA legislation on industry
- _____ 8. Proper procedures for HAZ/MAT removal
- _____ 9. Use of MSDS as it applies to industry
- _____ 10. Role of LEED Green Building Rating System
- _____ 11. City of LA Building/Safety Codes and industry
- _____ 12. CA Title 24 Energy Efficiency Standards
- _____ 13. Cal/OSHA laws for construction workers
- _____ 14. Responsibilities for safe workplace
- _____ 15. Safety test

B. RESOURCE MANAGEMENT (1 hr)

- _____ 1. Define listed terms related to topic
- _____ 2. Management of resources in construction
- _____ 3. Examples of effective management
- _____ 4. Benefits of effective resource management
- _____ 5. Environmentally responsible management

C. TRADE MATHEMATICS (10 hrs)

- _____ 1. Practical applications of math in industry
- _____ 2. Whole number problems
- _____ 3. Various fraction problems
- _____ 4. Various decimal problems
- _____ 5. Changing fractions to decimals
- _____ 6. Changing decimals to fractions
- _____ 7. English system: Measuring length
- _____ 8. English system: Measuring weight
- _____ 9. English system: Measuring volume/capacity

- _____ 10. Relationships of English system linear units
- _____ 11. Relationships of English units of volume
- _____ 12. English system measuring problems
- _____ 13. Measuring objects using tools of trades
- _____ 14. Geometric problems solving techniques
- _____ 15. Algebraic problems solving techniques
- _____ 16. Problem-solving techniques using percentages
- _____ 17. Reading and interpreting graphs
- _____ 18. Using a calculator

D. CONCRETE (30 hrs)

- _____ 1. Identify concrete tools and materials
- _____ 2. Use/maintenance/storage of tools/materials
- _____ 3. Define terms related to topic
- _____ 4. Demonstrate how to do formwork
- _____ 5. Proportions of materials in various applications
- _____ 6. Preparing/pouring cement: flat concrete slab
- _____ 7. Preparing/pouring cement for postholes

E. MASONRY (30 hrs)

- _____ 1. Types of trowels used in masonry work
- _____ 2. Use/maintenance/storage of masonry trowels
- _____ 3. Different ways of mixing mortar
- _____ 4. Identify different types of bricks
- _____ 5. Identify different methods of bricklaying
- _____ 6. Demonstrate methods of bricklaying
- _____ 7. Identify different types of blocks
- _____ 8. Techniques for repairing a brick wall
- _____ 9. Techniques for laying different types of tiles

F. FLOOR AND WALL CONSTRUCTION (50 hrs)

- _____ 1. Define terms related to topic
- _____ 2. Discuss /demonstrate construction techniques
- _____ 3. Slab vs. wood constructions

- _____ 4. Use of floor girders, floor joists, & sub-floors
- _____ 5. Plywood shear panel and diagonal bracing
- _____ 6. Demonstrate plumbing and aligning of walls
- _____ 7. Laying out and installing of ceiling joist
- _____ 8. Insulation that conforms to LEED specs
- _____ 9. Installation of LEED-approved materials

G. ROOF CONSTRUCTION (50 hrs)

- _____ 1. Define terms related to topic
- _____ 2. Features/functions of various roof pitches
- _____ 3. Features/functions of sheathing materials
- _____ 4. Differences between plywood & wafer board
- _____ 5. Various types of rafter tail designs
- _____ 6. Fascia board and overhang finishing
- _____ 7. Laying out, cutting, and erecting rafter types
- _____ 8. Installation of LEED-approved roof sheathing

H. EMPLOYABILITY SKILLS (4 hrs)

- _____ 1. Employer requirements in an employee
- _____ 2. Identify potential employers thru job search
- _____ 3. Role of social media in job search
- _____ 4. Sample résumé/cover letters
- _____ 5. Accurate, legible application
- _____ 6. Common mistakes made on job applications
- _____ 7. Complete sample job applications
- _____ 8. Enthusiasm on the job
- _____ 9. Appropriate appearance on a job
- _____ 10. Upgrading of skills on a job
- _____ 11. Customer service to build relationships
- _____ 12. Appropriate interviewing techniques
- _____ 13. Info material/resources for interview success
- _____ 14. Design sample follow-up letters
- _____ 15. Demo appropriate follow-up procedures