

CONSTRUCTION WORK/3 (180 Hours)

Course No.: 71-35-70

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. INTRODUCTION AND SAFETY (9 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. Promoting gender equity/non-trad hiring
- _____ 7. EPA legislation impact on industry practices
- _____ 8. Proper disposal of hazardous materials
- _____ 9. Demo use of MSDS in industry
- _____ 10. Role of LEED Green Building Rating System
- _____ 11. LA City Codes & applications to industry
- _____ 12. CA Title 24 Energy Efficiency Standards
- _____ 13. Cal/OSHA regulations for construction work
- _____ 14. Responsibilities for a safe workplace
- _____ 15. Safety test

B. RESOURCE MANAGEMENT REVIEW (1 hr)

- _____ 1. Define listed terms related to topic
- _____ 2. Management of time, materials, personnel
- _____ 3. Effective use of time, material, personnel
- _____ 4. Benefits of effective resource management
- _____ 5. Eco benefits of responsible management

C. TRADE MATHEMATICS REVIEW (10 hrs)

- _____ 1. Practical applications of math in industry
- _____ 2. Problem solving w/whole number problems
- _____ 3. Problem solving techniques with fractions
- _____ 4. Problem solving techniques with decimals
- _____ 5. Changing fractions to decimals
- _____ 6. Changing decimals to fractions
- _____ 7. English system of measuring length
- _____ 8. English system of measuring weight
- _____ 9. English system: measuring volume/capacity
- _____ 10. English system of linear units

- _____ 11. English system of units of volume/capacity
- _____ 12. English system measuring problems
- _____ 13. English system measuring w/tools of the trade
- _____ 14. Geometric problem solving techniques
- _____ 15. Algebraic problem solving techniques
- _____ 16. Problem-solving techniques using percentages
- _____ 17. Demonstrate reading and interpreting graphs
- _____ 18. Techniques for using a calculator

D. FINISH CARPENTRY (50 hrs)

- _____ 1. Different sizes & uses of finishing nails
- _____ 2. Demonstrate proper use of a power miter saw
- _____ 3. Cutting/applying baseboards/casings/moldings
- _____ 4. Installing kitchen and bathroom cabinets
- _____ 5. Techniques for hanging a door
- _____ 6. Techniques for installing & repairing windows

E. PLUMBING II (20 hrs)

- _____ 1. Safety issues specific to plumbing
- _____ 2. Different types of the tools/pipes/fixtures
- _____ 3. Use of cutting and threading tools
- _____ 4. Uses for various types and sizes of pipes
- _____ 5. Operation of various types of plumbing fixtures
- _____ 6. Proper soldering techniques
- _____ 7. Techniques for repairing &/or replacing valves
- _____ 8. Techniques for repairing plumbing problems
- _____ 9. Replacing listed plumbing fixtures
- _____ 10. Installing various fixtures/appliances into wall
- _____ 11. Identify landscape sprinkler set-ups & fittings
- _____ 12. Assembling landscape sprinkler pipes
- _____ 13. LEED vs. standard plumbing materials

F. ELECTRICAL II (15 hrs)

- _____ 1. National & local electrical code specifications
- _____ 2. Safety issues specific to the wiring system

- _____ 3. Different tools and electrical wiring parts
- _____ 4. Using hand tools and electrical wiring parts
- _____ 5. Metallic vs. non-metallic sheathed cables
- _____ 6. Functions of switches/circuit breakers/fuses
- _____ 7. Replacing wall receptacles & wall switches
- _____ 8. Techniques for installing light fixtures
- _____ 9. Electrical troubleshooting techniques
- _____ 10. Techniques for hard wiring appliances
- _____ 11. LEED vs. standard electrical materials

- _____ 3. Contributions to construction industry
- _____ 4. Purpose and components of a business plan
- _____ 5. Personal goals prior to starting a business
- _____ 6. Sources of monetary investment in business
- _____ 7. Various licensing requirements for industry
- _____ 8. Student as construction business owner
- _____ 9. LEED vs. standard business practices

G. ROOFING (35 hrs)

- _____ 1. Elements impact on roof installation/repair
- _____ 2. Features/applications of various roof types
- _____ 3. Local building codes that dictate roof types
- _____ 4. Number of roof layers before replacement
- _____ 5. Planning/estimating/ordering of materials
- _____ 6. Demonstrate proper sheathing requirements
- _____ 7. Demonstrate proper fastening requirements
- _____ 8. Calculation/installation of roof ventilation
- _____ 9. Techniques for skylight installation
- _____ 10. Preparing a roof deck for shingles
- _____ 11. Demo installation techniques for shingles
- _____ 12. Roof-to-roof/roof-to-wall flashing
- _____ 13. Stripping and re-shingling an old roof
- _____ 14. LEED vs. standard roofing materials

H. PAINTING (30 hrs)

- _____ 1. Uses for oil based paint
- _____ 2. Uses for water based paint
- _____ 3. Demonstrate painting skills and use of tools
- _____ 4. LEED vs. standard painting materials

I. EMPLOYABILITY SKILLS REVIEW (5 hrs)

- _____ 1. Employer requirements in an employee
- _____ 2. Update potential employers from job search
- _____ 3. Review role of social media in job search
- _____ 4. Finalize résumé
- _____ 5. Accurate, legible application
- _____ 6. Review common mistakes made on job app
- _____ 7. Complete sample job applications
- _____ 8. Importance of enthusiasm on the job
- _____ 9. Appropriate appearance on a job
- _____ 10. Continuous upgrading of skills on a job
- _____ 11. Customer service to build relationships
- _____ 12. Demo appropriate interview techniques
- _____ 13. Materials/resources for successful interview
- _____ 14. Finalize sample follow-up letter
- _____ 15. Demo appropriate follow-up procedures

J. ENTREPRENEURIAL SKILLS (5 hrs)

- _____ 1. Define entrepreneurship
- _____ 2. Characteristics of successful entrepreneurs