

MOBILE ELECTRONICS/2 (90 Hours)

Course No.: 72-55-90

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 (3 hrs)

- _____ 1. Review scope and purpose of course
- _____ 2. Overall content as part of linked learning
- _____ 3. Classroom policies and procedures
- _____ 4. Occupations in energy and utilities industry
- _____ 5. Gender equity of non-traditional populations
- _____ 6. EPA legislation on energy & utilities industry
- _____ 7. Hazardous material removal/EPA standards
- _____ 8. Cal/OSHA laws governing mobile electronics
- _____ 9. MSDS applies to mobile electronics industry
- _____ 10. Class & workplace first aid procedures
- _____ 11. Insuring a safe workplace
- _____ 12. Pass safety test with 100% accuracy

B. TRADE MATHEMATICS REVIEW (5 hrs)

- _____ 1. Applications of math in mobile electronics
- _____ 2. Problem-solving involving whole number
- _____ 3. Problem-solving of fractions problems
- _____ 4. Problem-solving of decimal problems
- _____ 5. Changing fractions to decimals
- _____ 6. Changing decimals to fractions
- _____ 7. English & metric system of measuring length
- _____ 8. English & metric system of measuring weight
- _____ 9. English/metric: volume/capacity measures
- _____ 10. English & metric measuring problem-solving
- _____ 11. Measuring techniques using tools of trade
- _____ 12. Metric units in ascending/descending order
- _____ 13. English numbering system to metric system
- _____ 14. Metric system to English numbering system
- _____ 15. Square roots of regular numbers
- _____ 16. Problem-solving of geometric problems
- _____ 17. Problem-solving of algebraic problems
- _____ 18. Problem-solving of percentages problems
- _____ 19. Reading/interpreting graphs

_____ 20. Decimal numbers to binary numbers

_____ 21. Binary numbers to decimal numbers

C. PRINCIPLES OF ELECTRONICS REVIEW (10 hrs)

- _____ 1. Review definitions of list related to topic
- _____ 2. Calculation of Ohm's Law equations
- _____ 3. Features/functions of electronic components
- _____ 4. Demo application of electronic skills/principles

D. TESTING EQUIPMENT REVIEW (5 hrs)

- _____ 1. Proper use/maintenance/storage
- _____ 2. Demo measuring/recording/diagnosing

E. AUTO ELECTRICITY REVIEW (10 hrs)

- _____ 1. Basic operation of auto electrical systems
- _____ 2. EMI & electronic components malfunction

F. SECURITY SYSTEMS (15 hrs)

- _____ 1. Define listed terms related to topic
- _____ 2. Identify systems/sensors/accessories
- _____ 3. Methods to suppress engine interference
- _____ 4. Demo listed techniques for security systems
- _____ 5. Demo vehicle security system to customer

G. NAVIGATION SYSTEMS (10 hrs)

- _____ 1. GPS system
- _____ 2. Installation/operation/troubleshooting of GPS

H. WIRELESS COMMUNICATION SYSTEMS (15 hrs)

- _____ 1. Define listed terms related to topic
- _____ 2. Cellular phone systems
- _____ 3. Parts of hands-free cellular phone systems
- _____ 4. Locations for hands-free phone installation
- _____ 5. Wiring requirements for Bluetooth devices
- _____ 6. Accessories for hands-free cellular phone
- _____ 7. Demo listed wireless system techniques

I. MOBILE ELECTRONICS CERTIFIED PROFESSIONAL

(MECP) EXAM (10 hrs)

- _____ 1. Review contents of certification examination
- _____ 2. Pass MECP exam with 80% accuracy

J. EMPLOYABILITY SKILLS REVIEW (3 hrs)

- _____ 1. Employer requirements in employee
- _____ 2. Update list of potential employers
- _____ 3. Electronic social networking in job search
- _____ 4. Update sample resumes
- _____ 5. Importance of filling out a job application
- _____ 6. Common mistakes made on job application
- _____ 7. Complete sample job application forms
- _____ 8. Enthusiasm on a job
- _____ 9. Appropriate appearance on a job
- _____ 10. Upgrading job skills
- _____ 11. Customer service to build business
- _____ 12. Interviewing techniques
- _____ 13. Materials/resources for successful interview
- _____ 14. Appropriate follow-up procedures

K. ENTREPRENEURIAL SKILLS (4 hrs)

- _____ 1. Entrepreneurship
- _____ 2. Characteristics of successful entrepreneurs
- _____ 3. Contributions by entrepreneurs to industry
- _____ 4. Purpose/components of a business plan
- _____ 5. Personal goals prior to starting a business
- _____ 6. Money investment in business opportunity
- _____ 7. Licensing in mobile electronics business
- _____ 8. Scenario: student as business owner
- _____ 9. LEEDs vs. standard business practices