

# **SYLLABUS AG FACILITIES DESIGN AND FABRICATION**

## **A. EMPLOYABILITY CHARACTERISTICS OF A SUCCESSFUL WORKER IN THE MODERN WORKPLACE**

- IDENTIFY CAREER DEVELOPMENT AND ENTREPRENEURSHIP OPPORTUNITIES IN THE FIELD OF MECHANIZED AGRICULTURE
- APPLY COMPETENCIES RELATED TO RESOURCES, INFORMATION, INTERPERSONAL SKILLS, AND SYSTEMS OF OPERATION OF MECHANIZED AGRICULTURE
- DEMONSTRATE KNOWLEDGE OF PERSONAL AND OCCUPATIONAL SAFETY PRACTICES IN THE WORKPLACE
- IDENTIFY EMPLOYERS' EXPECTATIONS, APPROPRIATE WORK HABITS, AND GOOD CITIZENSHIP SKILLS
- PLAN AND MANAGE SUPERVISED AGRICULTURAL EXPERIENCE PROGRAMS

## **B. TECHNICAL KNOWLEDGE AND ENTRY LEVEL WORKPLACE SKILLS IN THE INTERRELATED MECHANIZED AGRICULTURAL SYSTEMS**

- IDENTIFY AND SELECT AGRICULTURAL POWER SYSTEMS AND EQUIPMENT
- DIAGNOSE POWER SYSTEM CONDITIONS
- SERVICE AND REPAIR SMALL GASOLINE ENGINES
- SET UP, ADJUST, OPERATE, AND MAINTAIN AGRICULTURAL MACHINERY AND EQUIPMENT

## **C. MECHANIZED AGRICULTURE REPAIR SKILLS**

- EXPLAIN THE OPERATION OF ELECTRIC AND OXY-FUEL WELDING PROCEDURES
- PERFORM SOLDERING AND COLD METAL SKILLS AND TOOL MAINTENANCE

## **D. DEMONSTRATE PRINCIPLES AND PRACTICES RELATING TO AGRICULTURAL STRUCTURES**

- IDENTIFY, PLAN, AND CONSTRUCT AGRICULTURAL STRUCTURES
- DEMONSTRATE THE USE OF CONCRETE AND MASONRY IN AGRICULTURAL CONSTRUCTION
- PERFORM ELECTRICAL WIRING SKILLS
- SELECT AND MAINTAIN ELECTRICAL MOTORS AND CONTROLS FOR AGRICULTURAL APPLICATIONS

## **E. DEMONSTRATE SKILLS RELATED TO WATER MANAGEMENT**

- PLAN, ESTABLISH, AND MAINTAIN WATER MANAGEMENT AND IRRIGATION SYSTEMS
- PERFORM SKILLS IN LAND MEASURING AND LEVELING

**PLEASE SIGN AND RETURN**

**PARENT/GUARDIAN SIGNATURE** \_\_\_\_\_

**STUDENT SIGNATURE** \_\_\_\_\_