

SYLLABUS AG MECHANICS AND METAL TECHNOLOGY

Instructor: Mark Vitters

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

- CAREER DEVELOPMENT RELATING TO ENTREPRENEURSHIP AND EMPLOYMENT OPPORTUNITIES.
- RESOURCE ALLOCATION.
- INFORMATION PROCESSING.
- INTERPERSONAL RELATIONS.
- SOCIAL, ORGANIZATIONAL, AND TECHNOLOGICAL SYSTEMS.
- SELECTION AND APPLICATION OF TECHNOLOGY, PERSONAL AND OCCUPATIONAL SAFETY PRACTICES IN THE WORKPLACE
- SUPERVISED AGRICULTURAL EXPERIENCE ACTIVITIES

B. SAFE USE OF TOOLS AND EQUIPMENT.

- IDENTIFYING AND USING HAND TOOLS.
- IDENTIFYING AND USING POWER TOOLS.
- SELECTING AND USING MEASURING AND MARKING DEVICES.

C. BASIC ELECTRICAL WIRING PRINCIPLES AND PROCEDURES.

- BASIC TERMINOLOGY AND PRINCIPLES OF ELECTRICITY.
- PERFORMING ELECTRICAL WIRING SKILLS.
- MAINTAINING ELECTRIC MOTORS.

D. BASIC PLUMBING PRINCIPLES AND PROCEDURES.

- IDENTIFYING PLUMBING TOOLS AND FIXTURES.
- INSTALLING AND MAINTAINING WATER SYSTEMS.

E. BASIC CONCRETE CONSTRUCTION PRINCIPLES AND PROCEDURES.

- ESTIMATING MATERIAL NEEDS AND CONSTRUCTING FORMS.
- REINFORCING, PLACING, FINISHING, AND CURING CONCRETE.

F. BASIC CARPENTRY PRINCIPLES AND PROCEDURES.

- IDENTIFYING BUILDING MATERIALS.
- PLANNING AND CONSTRUCTING AGRICULTURAL STRUCTURES.
- APPLYING PAINTS AND PRESERVATIVES.

G. BASIC FENCING PRINCIPLES AND PROCEDURES.

- SELECTING FENCING MATERIALS AND PLANNING AND CONSTRUCTING FENCES.

H. COLD AND HOT METAL PROCESSES AND PROCEDURES.

- IDENTIFYING, CUTTING, FILING, SHAPING, AND DRILLING METAL.
- SELECTING AND OPERATING OXY-FUEL CUTTING AND WELDING EQUIPMENT.
- SELECTING AND OPERATING ELECTRIC ARC WELDING EQUIPMENT

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J. UNDERSTAND AND APPLY SAFE WORK PRACTICES DURING METAL FABRICATION

- IDENTIFYING SAFETY AND LABORATORY PROCEDURES
- IDENTIFYING AND USING POWER TOOLS.
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PLEASE SIGN AND RETURN.

PARENT/GUARDIAN SIGNATURE

STUDENT SIGNATURE