

**Florida Department of Education
CURRICULUM FRAMEWORK**

Program Title: Practical, Technical And Industrial Occupations
Program Type: Practical Arts
Occupational Area: Industrial Education
Components: N/A

	<u>Secondary</u>	
Program Numbers	8700300	
CIP Number	0646.9999PA	
Grade Level	9-12, 30, 31	
Length	1 Credit	
Certification	TEC CONSTR @7G	CARPENTRY @7G
	GAS FITTER @7G	BLDG CONST @7G
	APPLI REPR @7G	COMM COOK @7G
	HOME EC 1 @2	QUAN FOOD @7G
	VOC HME EC @4	TEC ELEC @7G
	AUTO MECH @7G	ELECTRONIC @7G
	TEC MECH @7G	AUTO IND @7G
	WELDING @7G	GAS ENG RPR @7G
	AIR MECH @7G	METAL WORK @7G
	SHEETMETAL @7G	AVIONICS @7G
	TEC DRAFT @7G	DRAFTING @7G
	BLDG MAINT @7G	ELECTRICAL @7G
	RADIO TV @7G	DIESEL MECH @7G
	COMM ART @7G	GRAPHIC ART 4 @2
	TROWEL TR @7G	

NOTE: Certification coverage must relate to course taught.

Facility Code	244
CTSO	SkillsUSA-VICA
Coop Method	No
Apprenticeship	No

- I. **PURPOSE:** The purpose of this program is to provide individuals with practical knowledge, skills, and attitudes relating to an occupational cluster within the technical and industrial program area. This content will better prepare the student in the selection of vocational and academic course work.

The content includes, but is not limited to, an overview of the subject trade occupational concepts of occupations within that cluster, to include realistic knowledge and expectations of the work environment, career potential, requirement for and extent of basic skills (math, science, and communications), employability skills, job skills, interpretation of technical documentation, job safety and the proper utilization of hand and power tools. Hands-on projects pertinent to the studied occupations must be included to reinforce the study of related materials and processes.

Program requirements may be met by completing one (1) of the following practical courses. Credit awarded for this series of courses may not exceed one (1).

8700310 - Practical Appliance Service
 8700320 - Practical Engine Mechanics

- 8700330 - Practical Construction Trades
- 8700340 - Practical Electrical/Electronics
- 8700350 - Practical Metal Work
- 8700360 - Practical Commercial Foods
- 8700370 - Practical Graphic Arts
- 8700380 - Practical Drafting
- 8700390 - Practical Aviation Careers

This program focuses on broad, transferable skills and stresses understanding and demonstration of the following elements of the Practical, Technical and Industrial Occupations industry; planning, management, finance, technical and production skills, underlying principles of technology, labor issues, community issues and health, safety, and environmental issues.

- II. **LABORATORY ACTIVITIES:** Learning activities are provided in a laboratory. Hands-on experience with the tools, machines and materials used in the occupational cluster are required.
- III. **SPECIAL NOTE:** SkillsUSA-VICA, Inc. is the appropriate Career and Technical Student Organization (CTSO) for providing leadership training and for reinforcing specific career and technical skills. Career and Technical Student Organizations, when provided, shall be an integral part of the career and technical instructional program, and the activities of such organizations are defined as part of the curriculum in accordance with Rule 6A-6.065, FAC.

This program enables individuals to achieve knowledge and practical competencies within an identified occupational cluster.

When a secondary student with a disability is enrolled in a vocational class with modifications to the curriculum framework, the particular outcomes and student performance standards which, the student must master to earn credit must be specified on an individual basis. The job or jobs for which the student is being trained should be reflected in the student's desired postschool outcome statement on the Transition Individual Educational Plan (Transition IEP).

- IV. **INTENDED OUTCOMES:** After successfully completing the program, the student will be able to:
 - 01.0 Demonstrate realistic knowledge of occupations, skills, and work environment within the occupational cluster associated with the course title of enrollment.
 - 02.0 Demonstrate acceptable professional and personal sanitation practices.
 - 03.0 Demonstrate safe working practices.
 - 04.0 Demonstrate equipment operation skills.
 - 05.0 Produce and interpret pertinent technical documentation.
 - 06.0 Use units and measurements relating to subject occupations.
 - 07.0 Construct projects or complete tasks.
 - 08.0 Identify pertinent materials and processes.
 - 09.0 Demonstrate appropriate communication skills.
 - 10.0 Demonstrate appropriate math skills.
 - 11.0 Demonstrate an understanding of appropriate basic science.
 - 12.0 Demonstrate employability skills in a laboratory environment.
 - 13.0 Demonstrate an understanding of entrepreneurship.

- 14.0 Research employment and training opportunities and career potential.
- 15.0 Demonstrate team skills.

Florida Department of Education
STUDENT PERFORMANCE STANDARDS

Course Number: 8700310
Course Title: Practical Appliance Service
Course Credit: 1

COURSE DESCRIPTION:

- 01.0 DEMONSTRATE REALISTIC KNOWLEDGE OF OCCUPATIONS, SKILLS, AND WORK ENVIRONMENT--The student will be able to:
- 01.01 Identify four service trades occupations.
 - 01.02 Relate the types of duties required of workers in each of four service trades areas.
 - 01.03 Describe the working conditions of workers in each of four service trades areas.
- 02.0 DEMONSTRATE ACCEPTABLE PROFESSIONAL AND PERSONAL SANITATION PRACTICES--The student will be able to:
- 02.01 Demonstrate acceptable employee health habits.
 - 02.02 Identify or demonstrate acceptable personal grooming habits.
- 03.0 DEMONSTRATE SAFE WORKING PRACTICES--The student will be able to:
- 03.01 Identify physical safety rules.
 - 03.02 Identify physical safety hazards.
 - 03.03 Recognize and correct or report physical safety hazards.
 - 03.04 Identify electrical safety rules.
 - 03.05 Identify electrical safety hazards.
 - 03.06 Recognize and correct or report electrical safety hazards.
 - 03.07 Identify fire safety rules.
 - 03.08 Identify fire safety hazards.
 - 03.09 Recognize and correct or report fire safety hazards.
 - 03.10 Identify first aid requirements.
- 04.0 DEMONSTRATE EQUIPMENT OPERATION SKILLS--The student will be able to:
- 04.01 Follow safety rules and procedures.
 - 04.02 Identify and properly use hand tools common to the service trades.
 - 04.03 Following safety rules established for power equipment.
 - 04.04 Safely use power equipment common to the service trades areas.
- 05.0 PRODUCE AND INTERPRET PERTINENT TECHNICAL DOCUMENTATION--The student will be able to:
- 05.01 Interpret various drawings and diagrams common to the service trades areas.
 - 05.02 Use service manuals to match diagrams with given equipment needing repairs.

- 06.0 USE UNITS AND MEASUREMENTS RELATING TO SUBJECT OCCUPATIONS--The student will be able to:
- 06.01 Identify common service trades measurement tools.
 - 06.02 Use measuring tools for a job specific to one of the service trades areas.
 - 06.03 Use precision measuring tools common to one of the service trades.
- 07.0 CONSTRUCT PROJECTS OR COMPLETE TASKS--The student will be able to:
- 07.01 Complete an assigned task in appliance repair.
 - 07.02 Complete an assigned task in customer relations.
 - 07.03 Complete an assigned task in another service trade area.
- 08.0 IDENTIFY PERTINENT MATERIALS AND PROCESSES--The student will be able to:
- 08.01 Identify by name given service trades materials.
 - 08.02 Identify the uses of given service trades materials.
- 09.0 DEMONSTRATE APPROPRIATE COMMUNICATION SKILLS--The student will be able to:
- 09.01 Write logical and understandable statements, or phrases, to accurately fill out forms/invoices commonly used in business and industry.
 - 09.02 Read and understand graphs, charts, diagrams, and tables commonly used in this industry/occupation area.
 - 09.03 Read and follow written and oral instructions.
 - 09.04 Answer and ask questions coherently and concisely.
 - 09.05 Read critically by recognizing assumptions and implications and by evaluating ideas.
 - 09.06 Demonstrate appropriate telephone/communication skills.
- 10.0 DEMONSTRATE APPROPRIATE MATH SKILLS--The student will be able to:
- 10.01 Solve problems for volume, weight, area, circumference and perimeter measurements for rectangles, squares, and cylinders.
 - 10.02 Add, subtract, multiply and divide using fractions, decimals, and whole numbers.
 - 10.03 Determine the correct purchase price, to include sales tax for a materials list containing a minimum of six items.
 - 10.04 Demonstrate an understanding of federal, state and local taxes and their computation.
- 11.0 DEMONSTRATE APPROPRIATE UNDERSTANDING OF BASIC SCIENCE--The student will be able to:
- 11.01 Understand molecular action as a result of temperature extremes, chemical reaction, and moisture content.
 - 11.02 Draw conclusions or make inferences from data.
 - 11.03 Identify health-related problems, which may result from exposure to work related chemicals and hazardous materials,

and know the proper precautions required for handling such materials.

- 12.0 DEMONSTRATE EMPLOYABILITY SKILLS--The student will be able to:
 - 12.01 Locate and select employment opportunities.
 - 12.02 Understand employment capabilities.
 - 12.03 Demonstrate employment seeking skills.
 - 12.04 Demonstrate appropriate work behavior.
 - 12.05 Project a professional image.
 - 12.06 Work individually and cooperatively as a member of regular or culturally diverse team.
 - 12.07 Balance personal and professional life.
 - 12.08 Use and conserve resources and energy.
 - 12.09 Demonstrate knowledge of the "Florida Right-To-Know Law" as recorded in Florida Statutes, Chapter 442.
 - 12.10 Adapt to change.

- 13.0 DEMONSTRATE AN UNDERSTANDING OF ENTREPRENEURSHIP--The student will be able to:
 - 13.01 Define entrepreneurship.
 - 13.02 Describe the importance of entrepreneurship to the American economy.
 - 13.03 Identify the necessary personal characteristics of a successful entrepreneur.

- 14.0 USE EMPLOYABILITY SKILLS TO RESEARCH JOB AND TRAINING OPPORTUNITIES--The student will be able to:
 - 14.01 List 3 ways to find a job in the service trades.
 - 14.02 List 3 different local service trades job openings, the qualifications for each and the salary for each.
 - 14.03 List the local training opportunities available in 3 or more service trades.

- 15.0 DEMONSTRATE TEAM SKILLS--The student will be able to:
 - 15.01 Participate as a responsible "team member" during laboratory activities.
 - 15.02 Work cooperatively with others.
 - 15.03 Perform a role in the shop cleanup and housekeeping schedule.

Florida Department of Education
STUDENT PERFORMANCE STANDARDS

Course Number: 8700320
Course Title: Practical Engine Mechanics
Course Credit: 1

COURSE DESCRIPTION:

- 01.0 DEMONSTRATE REALISTIC KNOWLEDGE OF OCCUPATIONS, SKILLS, AND WORK ENVIRONMENT--The student will be able to:
- 01.01 Identify three mechanics trades occupations.
 - 01.02 Relate the types of duties required of workers in each of three mechanics trades areas.
 - 01.03 Describe the working conditions of workers in each of three mechanics trades areas.
- 02.0 DEMONSTRATE ACCEPTABLE PROFESSIONAL AND PERSONAL SANITATION PRACTICES--The student will be able to:
- 02.01 Demonstrate acceptable employee health habits.
 - 02.02 Identify or demonstrate acceptable personal grooming habits.
- 03.0 DEMONSTRATE SAFE WORKING PRACTICES--The student will be able to:
- 03.01 Identify physical safety rules.
 - 03.02 Identify physical safety hazards.
 - 03.03 Recognize and correct or report physical safety hazards.
 - 03.04 Identify electrical safety rules.
 - 03.05 Identify electrical safety hazards.
 - 03.06 Recognize and correct or report electrical safety hazards.
 - 03.07 Identify fire safety rules.
 - 03.08 Identify fire safety hazards.
 - 03.09 Recognize and correct or report fire safety hazards.
 - 03.10 Identify first aid requirements.
- 04.0 DEMONSTRATE EQUIPMENT OPERATION SKILLS--The student will be able to:
- 04.01 Follow safety rules and procedures.
 - 04.02 Identify and properly use hand tools common to the mechanics trades.
 - 04.03 Follow safety rules established for power equipment.
 - 04.04 Safely use common mechanics trades power tools and equipment.
- 05.0 PRODUCE AND INTERPRET PERTINENT TECHNICAL DOCUMENTATION--The student will be able to:
- 05.01 Interpret mechanics trade drawings.
 - 05.02 Interpret mechanics trade manuals.

- 06.0 USE UNITS AND MEASUREMENTS RELATING TO SUBJECT OCCUPATIONS--The student will be able to:
- 06.01 Identify common mechanics trades measuring tools.
 - 06.02 Use measuring tools to measure a specific mechanics trade job.
 - 06.03 Use mechanics trades precision measuring tools.
- 07.0 CONSTRUCT PROJECTS OR COMPLETE TASKS--The student will be able to:
- 07.01 Complete an assigned task in the auto mechanics area.
 - 07.02 Complete an assigned task in the small gas engine area.
 - 07.03 Complete an assigned task in another mechanics area.
- 08.0 IDENTIFY PERTINENT MATERIALS AND PROCESSES--The student will be able to:
- 08.01 Identify by name various mechanical parts.
 - 08.02 Identify by use of parts catalogs the use of given mechanical parts.
- 09.0 DEMONSTRATE APPROPRIATE COMMUNICATION SKILLS--The student will be able to:
- 09.01 Write logical and understandable statements, or phrases, to accurately fill out forms/invoices commonly used in business and industry.
 - 09.02 Read and understand graphs, charts, diagrams, and tables commonly used in this industry/occupation area.
 - 09.03 Read and follow written and oral instructions.
 - 09.04 Answer and ask questions coherently and concisely.
 - 09.05 Read critically by recognizing assumptions and implications and by evaluating ideas.
 - 09.06 Demonstrate appropriate telephone/communication skills.
- 10.0 DEMONSTRATE APPROPRIATE MATH SKILLS--The student will be able to:
- 10.01 Solve problems for volume, weight, area, circumference and perimeter measurements for rectangles, squares, and cylinders.
 - 10.02 Add, subtract, multiply and divide using fractions, decimals, and whole numbers.
 - 10.03 Determine the correct purchase price, to include sales tax for a materials list containing a minimum of six items.
 - 10.04 Demonstrate an understanding of federal, state and local taxes and their computation.
- 11.0 DEMONSTRATE APPROPRIATE UNDERSTANDING OF BASIC SCIENCE--The student will be able to:
- 11.01 Understand molecular action as a result of temperature extremes, chemical reaction, and moisture content.
 - 11.02 Draw conclusions or make inferences from data.
 - 11.03 Identify health-related problems, which may result from exposure to work related chemicals and hazardous materials,

and know the proper precautions required for handling such materials.

12.0 DEMONSTRATE EMPLOYABILITY SKILLS--The student will be able to:

- 12.01 Locate and select employment opportunities.
- 12.02 Understand employment capabilities.
- 12.03 Demonstrate employment seeking skills.
- 12.04 Demonstrate appropriate work behavior.
- 12.05 Project a professional image.
- 12.06 Work individually and cooperatively as a member of regular or culturally diverse team.
- 12.07 Balance personal and professional life.
- 12.08 Use and conserve resources and energy.
- 12.09 Demonstrate knowledge of the "Florida Right-To-Know Law" as recorded in Florida Statutes, Chapter 442.
- 12.10 Adapt to change.

13.0 DEMONSTRATE AN UNDERSTANDING OF ENTREPRENEURSHIP--The student will be able to:

- 13.01 Define entrepreneurship.
- 13.02 Describe the importance of entrepreneurship to the American economy.
- 13.03 Identify the necessary personal characteristics of a successful entrepreneur.

14.0 USE EMPLOYABILITY SKILLS TO RESEARCH JOB AND TRAINING OPPORTUNITIES--The student will be able to:

- 14.01 List 3 ways to find a job in the mechanics trades.
- 14.02 List 3 different local mechanics trades job openings, the qualifications for each and the salary for each.
- 14.03 List the local training opportunities available in 3 or more mechanics trades areas.

15.0 DEMONSTRATE TEAM SKILLS--The student will be able to:

- 15.01 Participate as a responsible "team member" during laboratory activities.
- 15.02 Work cooperatively with others.
- 15.03 Perform a role in the shop cleanup and housekeeping schedule.

Florida Department of Education
STUDENT PERFORMANCE STANDARDS

Course Number: 8700330
Course Title: Practical Construction Trades
Course Credit: 1

COURSE DESCRIPTION:

- 01.0 DEMONSTRATE REALISTIC KNOWLEDGE OF OCCUPATIONS, SKILLS, AND WORK ENVIRONMENT--The student will be able to:
- 01.01 Identify four construction trades occupations.
 - 01.02 Relate the types of duties required of employees in each of two construction trades areas.
 - 01.03 Describe the working conditions of workers in each of three construction trades areas.
- 02.0 DEMONSTRATE ACCEPTABLE PROFESSIONAL AND PERSONAL SANITATION PRACTICES--The student will be able to:
- 02.01 Demonstrate acceptable employee health habits.
 - 02.02 Identify or demonstrate acceptable personal grooming habits.
- 03.0 DEMONSTRATE SAFE WORKING PRACTICES--The student will be able to:
- 03.01 Identify physical safety rules.
 - 03.02 Identify physical safety hazards.
 - 03.03 Recognize and correct or report physical safety hazards.
 - 03.04 Identify electrical safety rules.
 - 03.05 Identify electrical safety hazards.
 - 03.06 Recognize and correct or report electrical safety hazards.
 - 03.07 Identify fire safety rules.
 - 03.08 Identify fire safety hazards.
 - 03.09 Recognize and correct or report fire safety hazards.
 - 03.10 Identify first aid requirements.
- 04.0 DEMONSTRATE EQUIPMENT OPERATION SKILLS--The student will be able to:
- 04.01 Follow safety rules and procedures.
 - 04.02 Identify and properly use hand tools common to the construction trades.
 - 04.03 Follow safety rules established for power equipment.
 - 04.04 Safely use common construction trades power tools.
- 05.0 PRODUCE AND INTERPRET PERTINENT TECHNICAL DOCUMENTATION--The student will be able to:
- 05.01 Interpret blueprints of various construction trades.
 - 05.02 Draw freehand sketches of specific construction trade jobs.
 - 05.03 Make a floor plan for a residence showing plumbing and electrical symbols.

- 06.0 USE UNITS AND MEASUREMENTS RELATING TO SUBJECT OCCUPATIONS--The student will be able to:
- 06.01 Identify common construction trades measurement and layout tools.
 - 06.02 Use measuring tools to layout a given construction trade job to specific dimensions.
 - 06.03 Use precision construction trades measurement tools.
- 07.0 CONSTRUCT PROJECTS OR COMPLETE TASKS--The student will be able to:
- 07.01 Prepare a sketched plan and construct a carpentry project.
 - 07.02 Prepare a sketched plan and construct a brick or block laying project.
 - 07.03 Complete an assigned task in another construction trade area.
- 08.0 IDENTIFY PERTINENT MATERIALS AND PROCESSES--The student will be able to:
- 08.01 Identify by name various types of building materials.
 - 08.02 Identify by name various shapes of concrete block.
 - 08.03 Identify various roofing materials.
- 09.0 DEMONSTRATE APPROPRIATE COMMUNICATION SKILLS--The student will be able to:
- 09.01 Write logical and understandable statements, or phrases, to accurately fill out forms/invoices commonly used in business and industry.
 - 09.02 Read and understand graphs, charts, diagrams, and tables commonly used in this industry/occupation area.
 - 09.03 Read and follow written and oral instructions.
 - 09.04 Answer and ask questions coherently and concisely.
 - 09.05 Read critically by recognizing assumptions and implications and by evaluating ideas.
 - 09.06 Demonstrate appropriate telephone/communication skills.
- 10.0 DEMONSTRATE APPROPRIATE MATH SKILLS--The student will be able to:
- 10.01 Solve problems for volume, weight, area, circumference and perimeter measurements for rectangles, squares, and cylinders.
 - 10.02 Add, subtract, multiply and divide using fractions, decimals, and whole numbers.
 - 10.03 Determine the correct purchase price, to include sales tax for a materials list containing a minimum of six items.
 - 10.04 Demonstrate an understanding of federal, state and local taxes and their computation.
- 11.0 DEMONSTRATE APPROPRIATE UNDERSTANDING OF BASIC SCIENCE--The student will be able to:
- 11.01 Understand molecular action as a result of temperature extremes, chemical reaction, and moisture content.
 - 11.02 Draw conclusions or make inferences from data.

- 11.03 Identify health-related problems which may result from exposure to work related chemicals and hazardous materials, and know the proper precautions required for handling such materials.
- 12.0 DEMONSTRATE EMPLOYABILITY SKILLS--The student will be able to:
 - 12.01 Locate and select employment opportunities.
 - 12.02 Understand employment capabilities.
 - 12.03 Demonstrate employment seeking skills.
 - 12.04 Demonstrate appropriate work behavior.
 - 12.05 Project a professional image.
 - 12.06 Work individually and cooperatively as a member of regular or culturally diverse team.
 - 12.07 Balance personal and professional life.
 - 12.08 Use and conserve resources and energy.
 - 12.09 Demonstrate knowledge of the "Florida Right-To-Know Law" as recorded in Florida Statutes, Chapter 442.
 - 12.10 Adapt to change.
- 13.0 DEMONSTRATE AN UNDERSTANDING OF ENTREPRENEURSHIP--The student will be able to:
 - 13.01 Define entrepreneurship.
 - 13.02 Describe the importance of entrepreneurship to the American economy.
 - 13.03 Identify the necessary personal characteristics of a successful entrepreneur.
- 14.0 USE EMPLOYABILITY SKILLS TO RESEARCH JOB AND TRAINING OPPORTUNITIES--The student will be able to:
 - 14.01 List 3 ways to find a job in the construction trades.
 - 14.02 List 3 different local construction trades job openings, the qualifications for each and the salary for each.
 - 14.03 List the local training opportunities available in 3 or more construction trades.
- 15.0 DEMONSTRATE TEAM SKILLS--The student will be able to:
 - 15.01 Participate as a responsible "team member" during laboratory activities.
 - 15.02 Work cooperatively with others.
 - 15.03 Perform a role in the shop cleanup and housekeeping schedule.

Florida Department of Education
STUDENT PERFORMANCE STANDARDS

Course Number: 8700340
Course Title: Practical Electrical/Electronics
Course Credit: 1

COURSE DESCRIPTION:

- 01.0 DEMONSTRATE REALISTIC KNOWLEDGE OF OCCUPATIONS, SKILLS, AND WORK ENVIRONMENT--The student will be able to:
 - 01.01 Identify four electrical/electronics occupations.
 - 01.02 Relate the types of duties required of workers in each of three electrical/electronics trades areas.
 - 01.03 Describe the working conditions of workers in each of three electrical/electronics trades area.

- 02.0 DEMONSTRATE ACCEPTABLE PROFESSIONAL AND PERSONAL SANITATION PRACTICES--The student will be able to:
 - 02.01 Demonstrate acceptable employee health habits.
 - 02.02 Identify or demonstrate acceptable personal grooming habits.

- 03.0 DEMONSTRATE SAFE WORKING PRACTICES--The student will be able to:
 - 03.01 Identify physical safety rules.
 - 03.02 Identify physical safety hazards.
 - 03.03 Recognize and correct or report physical safety hazards.
 - 03.04 Identify electrical safety rules.
 - 03.05 Identify electrical safety hazards.
 - 03.06 Recognize and correct or report electrical safety hazards.
 - 03.07 Identify fire safety rules.
 - 03.08 Identify fire safety hazards.
 - 03.09 Recognize and correct or report fire safety hazards.
 - 03.10 Identify first aid requirements.

- 04.0 DEMONSTRATE EQUIPMENT OPERATION SKILLS--The student will be able to:
 - 04.01 Follow safety rules and procedures.
 - 04.02 Identify and properly use hand tools common to the electrical/electronics trades.
 - 04.03 Follow safety rules established for power equipment.
 - 04.04 Safely use common electrical/electronics trades.

- 05.0 PRODUCE AND INTERPRET PERTINENT TECHNICAL DOCUMENTATION--The student will be able to:
 - 05.01 Interpret schematic symbols and diagrams.
 - 05.02 Interpret block diagrams.
 - 05.03 Interpret flow charts.
 - 05.04 Draw a simple schematic diagram.

- 06.0 USE UNITS AND MEASUREMENTS RELATING TO SUBJECT OCCUPATIONS--The student will be able to:
- 06.01 Identify common electrical/electronics trades measurement tools.
 - 06.02 Use precision electrical/electronics meters to measure specific quantities.
- 07.0 CONSTRUCT PROJECTS OR COMPLETE TASKS--The student will be able to:
- 07.01 Prepare a schematic and wire an electronics project.
 - 07.02 Prepare a circuit diagram and wire a residential circuit.
 - 07.03 Prepare a block diagram and wire a logic circuit on a trainer.
- 08.0 IDENTIFY PERTINENT MATERIALS AND PROCESSES--The student will be able to:
- 08.01 Identify by name various types electronics components.
 - 08.02 Identify by name given electrical hardware.
- 09.0 DEMONSTRATE APPROPRIATE COMMUNICATION SKILLS--The student will be able to:
- 09.01 Write logical and understandable statements, or phrases, to accurately fill out forms/invoices commonly used in business and industry.
 - 09.02 Read and understand graphs, charts, diagrams, and tables commonly used in this industry/occupation area.
 - 09.03 Read and follow written and oral instructions.
 - 09.04 Answer and ask questions coherently and concisely.
 - 09.05 Read critically by recognizing assumptions and implications and by evaluating ideas.
 - 09.06 Demonstrate appropriate telephone/communication skills.
- 10.0 DEMONSTRATE APPROPRIATE MATH SKILLS--The student will be able to:
- 10.01 Solve problems for volume, weight, area, circumference and perimeter measurements for rectangles, squares, and cylinders.
 - 10.02 Measure tolerance(s) on horizontal and vertical surfaces using millimeters, centimeters, feet and inches.
 - 10.03 Add, subtract, multiply and divide using fractions, decimals, and whole numbers.
 - 10.04 Determine the correct purchase price, to include sales tax for a materials list containing a minimum of six items.
 - 10.05 Demonstrate an understanding of federal, state and local taxes and their computation.
- 11.0 DEMONSTRATE APPROPRIATE UNDERSTANDING OF BASIC SCIENCE--The student will be able to:
- 11.01 Understand molecular action as a result of temperature extremes, chemical reaction, and moisture content.
 - 11.02 Draw conclusions or make inferences from data.
 - 11.03 Identify health-related problems, which may result from exposure to work related chemicals and hazardous materials,

and know the proper precautions required for handling such materials.

- 12.0 DEMONSTRATE EMPLOYABILITY SKILLS--The student will be able to:
 - 12.01 Locate and select employment opportunities.
 - 12.02 Understand employment capabilities.
 - 12.03 Demonstrate employment seeking skills.
 - 12.04 Demonstrate appropriate work behavior.
 - 12.05 Project a professional image.
 - 12.06 Work individually and cooperatively as a member of regular or culturally diverse team.
 - 12.07 Balance personal and professional life.
 - 12.08 Use and conserve resources and energy.
 - 12.09 Demonstrate knowledge of the "Florida Right-To-Know Law" as recorded in Florida Statutes, Chapter 442.
 - 12.10 Adapt to change.

- 13.0 DEMONSTRATE AN UNDERSTANDING OF ENTREPRENEURSHIP--The student will be able to:
 - 13.01 Define entrepreneurship.
 - 13.02 Describe the importance of entrepreneurship to the American economy.
 - 13.03 Identify the necessary personal characteristics of a successful entrepreneur.

- 14.0 USE EMPLOYABILITY SKILLS TO RESEARCH JOB AND TRAINING OPPORTUNITIES--The student will be able to:
 - 14.01 List 3 ways to find a job in the electrical/electronics trades.
 - 14.02 List 3 different local electrical/electronics trades job openings, the qualifications for each and the salary for each.
 - 14.03 List the local training opportunities available in 3 electrical/electronics trades area.

- 15.0 DEMONSTRATE TEAM SKILLS--The student will be able to:
 - 15.01 Participate as a responsible "team member" during laboratory activities.
 - 15.02 Work cooperatively with others.
 - 15.03 Perform a role in the shop cleanup and housekeeping schedule.

Florida Department of Education
STUDENT PERFORMANCE STANDARDS

Course Number: 8700350
Course Title: Practical Metal Work
Course Credit: 1

COURSE DESCRIPTION:

- 01.0 DEMONSTRATE REALISTIC KNOWLEDGE OF OCCUPATIONS, SKILLS, AND WORK ENVIRONMENT--The student will be able to:
 - 01.01 Identify four metals trades occupations.
 - 01.02 Relate the types of duties required of employees in each of two metals trades areas.
 - 01.03 Describe the working conditions of employees in each of two metals trades areas.

- 02.0 DEMONSTRATE ACCEPTABLE PROFESSIONAL AND PERSONAL SANITATION PRACTICES--The student will be able to:
 - 02.01 Demonstrate acceptable employee health habits.
 - 02.02 Identify or demonstrate acceptable personal grooming habits.

- 03.0 DEMONSTRATE SAFE WORKING PRACTICES--The student will be able to:
 - 03.01 Identify physical safety rules.
 - 03.02 Identify physical safety hazards.
 - 03.03 Recognize and correct or report physical safety hazards.
 - 03.04 Identify electrical safety rules.
 - 03.05 Identify electrical safety hazards.
 - 03.06 Recognize and correct or report electrical safety hazards.
 - 03.07 Identify fire safety rules.
 - 03.08 Identify fire safety hazards.
 - 03.09 Recognize and correct or report fire safety hazards.
 - 03.10 Identify first aid requirements.

- 04.0 DEMONSTRATE EQUIPMENT OPERATION SKILLS--The student will be able to:
 - 04.01 Follow safety rules and procedures.
 - 04.02 Identify and properly use hand tools common to the sheetmetals, machine shop and welding trades.
 - 04.03 Follow safety rules established for power equipment.
 - 04.04 Safely use common machine shop, welding and sheetmetal trades power tools and equipment.

- 05.0 PRODUCE AND INTERPRET PERTINENT TECHNICAL DOCUMENTATION--The student will be able to:
 - 05.01 Interpret various metals trades plans.
 - 05.02 Draw freehand sketches of specific metals trades projects with dimensions.

- 06.0 USE UNITS AND MEASUREMENTS RELATING TO SUBJECT OCCUPATIONS--The student will be able to:
- 06.01 Identify common metals trades measurement and layout tools.
 - 06.02 Use measuring tools to layout a given metals trade job to specific dimensions.
 - 06.03 Use precision metals trades measurement tools.
- 07.0 CONSTRUCT PROJECTS OR COMPLETE TASKS--The student will be able to:
- 07.01 Prepare a sketched working drawing, select materials and construct a useful sheetmetal project.
 - 07.02 Prepare a sketched working drawing, select materials and construct a useful machine shop project.
 - 07.03 Prepare a sketched working drawing, select materials and construct a useful welding project.
- 08.0 IDENTIFY PERTINENT MATERIALS AND PROCESSES--The student will be able to:
- 08.01 Identify by name given sheetmetal samples.
 - 08.02 Identify by name given sheet structural shapes.
 - 08.03 Identify the uses of common metals used in machine shop work.
- 09.0 DEMONSTRATE APPROPRIATE COMMUNICATION SKILLS--The student will be able to:
- 09.01 Write logical and understandable statements, or phrases, to accurately fill out forms/invoices commonly used in business and industry.
 - 09.02 Read and understand graphs, charts, diagrams, and tables commonly used in this industry/occupation area.
 - 09.03 Read and follow written and oral instructions.
 - 09.04 Answer and ask questions coherently and concisely.
 - 09.05 Read critically by recognizing assumptions and implications and by evaluating ideas.
 - 09.06 Demonstrate appropriate telephone/communication skills.
- 10.0 DEMONSTRATE APPROPRIATE MATH SKILLS--The student will be able to:
- 10.01 Solve problems for volume, weight, area, circumference and perimeter measurements for rectangles, squares, and cylinders.
 - 10.02 Measure tolerance(s) on horizontal and vertical surfaces using millimeters, centimeters, feet and inches.
 - 10.03 Add, subtract, multiply and divide using fractions, decimals, and whole numbers.
 - 10.04 Determine the correct purchase price, to include sales tax for a materials list containing a minimum of six items.
 - 10.05 Demonstrate an understanding of federal, state and local taxes and their computation.
- 11.0 DEMONSTRATE APPROPRIATE UNDERSTANDING OF BASIC SCIENCE--The student will be able to:

- 11.01 Understand molecular action as a result of temperature extremes, chemical reaction, and moisture content.
 - 11.02 Draw conclusions or make inferences from data.
 - 11.03 Identify health-related problems, which may result from exposure to work related chemicals and hazardous materials, and know the proper precautions required for handling such materials.
 - 11.04 Understand pressure measurement in terms of P.S.I., inches of mercury, and K.P.A.
- 12.0 DEMONSTRATE EMPLOYABILITY SKILLS--The student will be able to:
- 12.01 Locate and select employment opportunities.
 - 12.02 Understand employment capabilities.
 - 12.03 Demonstrate employment seeking skills.
 - 12.04 Demonstrate appropriate work behavior.
 - 12.05 Project a professional image.
 - 12.06 Work individually and cooperatively as a member of regular or culturally diverse team.
 - 12.07 Balance personal and professional life.
 - 12.08 Use and conserve resources and energy.
 - 12.09 Demonstrate knowledge of the "Florida Right-To-Know Law" as recorded in Florida Statutes, Chapter 442.
 - 12.10 Adapt to change.
- 13.0 DEMONSTRATE AN UNDERSTANDING OF ENTREPRENEURSHIP--The student will be able to:
- 13.01 Define entrepreneurship.
 - 13.02 Describe the importance of entrepreneurship to the American economy.
 - 13.03 Identify the necessary personal characteristics of a successful entrepreneur.
- 14.0 USE EMPLOYABILITY SKILLS TO RESEARCH JOB AND TRAINING OPPORTUNITIES--The student will be able to:
- 14.01 List 3 ways to find a job in the metals trades.
 - 14.02 List 3 different local metals trades job openings, the qualifications for each and the salary for each.
 - 14.03 List the local training opportunities available in 3 or more metals trades areas.
- 15.0 DEMONSTRATE TEAM SKILLS--The student will be able to:
- 15.01 Participate as a responsible "team member" during laboratory activities.
 - 15.02 Work cooperatively with others.
 - 15.03 Perform a role in the shop cleanup and housekeeping schedule.

Florida Department of Education
STUDENT PERFORMANCE STANDARDS

Course Number: 8700360
Course Title: Practical Commercial Foods
Course Credit: 1

COURSE DESCRIPTION:

- 01.0 DEMONSTRATE REALISTIC KNOWLEDGE OF OCCUPATIONS, SKILLS, AND WORK ENVIRONMENT--The student will be able to:
- 01.01 Identify four food service occupations.
 - 01.02 Relate the duties and responsibilities of workers in each of four identified occupations.
 - 01.03 Describe the working conditions of persons employed in each of four identified occupations.
- 02.0 DEMONSTRATE ACCEPTABLE PROFESSIONAL AND PERSONAL SANITATION PRACTICES--The student will be able to:
- 02.01 Chemical/Cleaning Agents
 - 02.01.01 Identify chemicals/cleaning agents and describe and practice proper usage.
 - 02.01.02 Identify and practice proper storage procedures for chemicals/cleaning agents.
 - 02.01.03 Identify and practice personnel handling precautions for caustics and acids.
 - 02.01.04 Identify dangers of food contamination by chemicals/cleaning agents and identify and practice precautions against food contamination by chemicals/cleaning agents.
 - 02.02 Food Borne Illness
 - 02.02.01 Identify food borne illness and possible/probable causes.
 - 02.02.02 Identify and practice preventative measures to preclude the occurrence of food borne illness.
 - 02.03 Personal Sanitation
 - 02.03.01 Recognize and practice personal hygiene standards consistent with aesthetic and sanitation requirements of food service operations.
 - 02.04 Receiving/Dry Stores Area
 - 02.04.01 Recognize and maintain a clean and sanitary receiving/dry stores area.
 - 02.04.02 Clean and sanitize floors and walls.
 - 02.04.03 Recognize and report indications of food spoilage.
 - 02.04.04 Recognize and report indications of insect or rodent infestation.
 - 02.05 Food Preparation Areas
 - 02.05.01 Recognize and maintain clean and sanitary food preparation surfaces.
 - 02.05.02 Clean and sanitize floors and walls.
 - 02.05.03 Recognize and report indications of insect or rodent infestation.

03.0 DEMONSTRATE SAFE WORKING PRACTICES--The student will be able to:

03.01 Safety Hazards

- 03.01.01 Identify physical safety rules.
- 03.01.02 Identify physical safety hazards.
- 03.01.03 Recognize and correct or report physical safety hazards.
- 03.01.04 Identify electrical safety rules.
- 03.01.05 Identify electrical safety hazards.
- 03.01.06 Recognize and correct or report electrical safety hazards.
- 03.01.07 Identify fire safety rules.
- 03.01.08 Identify fire safety hazards.
- 03.01.09 Recognize and correct or report fire safety hazards.

03.02 First Aid

- 03.02.01 Identify first aid requirements for a commercial food service operation.
- 03.02.02 Prepare subject and perform Heimlich maneuver.

04.0 DEMONSTRATE EQUIPMENT OPERATION SKILLS--The student will be able to:

04.01 Hand Tools

- 04.01.01 Identify special precautions to be used when working with hand tools.
- 04.01.02 Select and use hand tools in a safe and efficient manner.

04.02 Knives and Cutting Tools

- 04.02.01 Identify special precautions to be used when working with knives and cutting tools.
- 04.02.02 Sharpen correctly knives and cutting tools. Inspect handles and guards and report any discrepancy.
- 04.02.03 Use knives and cutting tools in a safe and efficient manner.

04.03 Mixers and Blenders

- 04.03.01 Identify special precautions to be used when working with mixers and blenders.
- 04.03.02 Correctly assemble and disassemble equipment.
- 04.03.03 Operate mixers and blenders in a safe and efficient manner.
- 04.03.04 Perform the above competencies for all accessories or attachments used with the equipment.

04.04 Ovens, Ranges, Griddles, Fryers, Broilers, and Toasters

- 04.04.01 Identify special precautions to be used when working with ovens, ranges, griddles, fryers, broilers and toasters.
- 04.04.02 Correctly assemble and disassemble equipment. Inspect all parts and report any discrepancy.
- 04.04.03 Operate ovens, ranges, griddles, fryers, broilers and toasters in a safe and efficient manner.

- 05.0 PRODUCE AND INTERPRET PERTINENT TECHNICAL DOCUMENTATION--The student will be able to:
- 05.01 Select appropriate recipe or recipes for a given food product.
 - 05.02 Identify ingredients and required quantities for a given recipe.
 - 05.03 Convert recipes for both greater and lesser number of portions.
 - 05.04 Draw a simple schematic diagram.
- 06.0 USE UNITS AND MEASUREMENTS RELATING TO SUBJECT OCCUPATIONS--The student will be able to:
- 06.01 Identify standard volume, liquid and weight, as they apply to commercial food operations.
 - 06.02 Convert accurately between standard units of measure as applicable to commercial food operations.
- 07.0 CONSTRUCT PROJECTS OR COMPLETE TASKS--The student will be able to:
- 07.01 Identify and select materials for a given recipe.
 - 07.02 Prepare given recipe.
 - 07.03 Hold product for service.
 - 07.04 Garnish and present product as appropriate.
 - 07.05 Store reusable portions.
- 08.0 IDENTIFY PERTINENT MATERIALS AND PROCESSES--The student will be able to:
- 08.01 Identify chemical/cleaning agents and their respective use and precautions.
 - 08.02 Identify consumable non-food items and their respective used.
 - 08.03 Identify food groups and associated hazards and precautions.
- 09.0 DEMONSTRATE APPROPRIATE COMMUNICATION SKILLS--The student will be able to:
- 09.01 Write logical and understandable statements, or phrases, to accurately fill out forms/invoices commonly used in business and industry.
 - 09.02 Read and understand graphs, charts, diagrams, and tables commonly used in this industry/occupation area.
 - 09.03 Read and follow written and oral instructions.
 - 09.04 Answer and ask questions coherently and concisely.
 - 09.05 Read critically by recognizing assumptions and implications and by evaluating ideas.
 - 09.06 Demonstrate appropriate telephone/communication skills.
- 10.0 DEMONSTRATE APPROPRIATE MATH SKILLS--The student will be able to:
- 10.01 Solve problems for volume, weight, area, circumference and perimeter measurements for rectangles, squares, and cylinders.
 - 10.02 Add, subtract, multiply and divide using fractions, decimals, and whole numbers.

- 10.03 Determine the correct purchase price, to include sales tax for a materials list containing a minimum of six items.
- 10.04 Demonstrate an understanding of federal, state and local taxes and their computation.
- 11.0 DEMONSTRATE APPROPRIATE UNDERSTANDING OF BASIC SCIENCE--The student will be able to:
 - 11.01 Understand molecular action as a result of temperature extremes, chemical reaction, and moisture content.
 - 11.02 Draw conclusions or make inferences from data.
 - 11.03 Identify health-related problems, which may result from exposure to work related chemicals and hazardous materials, and know the proper precautions required for handling such materials.
- 12.0 DEMONSTRATE EMPLOYABILITY SKILLS--The student will be able to:
 - 12.01 Locate and select employment opportunities.
 - 12.02 Understand employment capabilities.
 - 12.03 Demonstrate employment seeking skills.
 - 12.04 Demonstrate appropriate work behavior.
 - 12.05 Project a professional image.
 - 12.06 Work individually and cooperatively as a member of regular or culturally diverse team.
 - 12.07 Balance personal and professional life.
 - 12.08 Use and conserve resources and energy.
 - 12.09 Demonstrate knowledge of the "Florida Right-To-Know Law" as recorded in Florida Statutes, Chapter 442.
 - 12.10 Adapt to change.
- 13.0 DEMONSTRATE AN UNDERSTANDING OF ENTREPRENEURSHIP--The student will be able to:
 - 13.01 Define entrepreneurship.
 - 13.02 Describe the importance of entrepreneurship to the American economy.
 - 13.03 Identify the necessary personal characteristics of a successful entrepreneur.
- 14.0 USE EMPLOYABILITY SKILLS TO RESEARCH JOB AND TRAINING OPPORTUNITIES--The student will be able to:
 - 14.01 List 3 ways to find a job in the food service industry.
 - 14.02 List 3 different local food service industry job openings, the qualifications for each and the salary for each.
 - 14.03 List the local training opportunities available in 3 or more food service industries.
- 15.0 DEMONSTRATE TEAM SKILLS--The student will be able to:
 - 15.01 Participate as a responsible "team member" during laboratory activities.
 - 15.02 Work cooperatively with others.
 - 15.03 Perform a role in the shop cleanup and housekeeping schedule.

Florida Department of Education
STUDENT PERFORMANCE STANDARDS

Course Number: 8700370
Course Title: Practical Graphic Arts
Course Credit: 1

COURSE DESCRIPTION:

- 01.0 DEMONSTRATE REALISTIC KNOWLEDGE OF OCCUPATIONS, SKILLS, AND WORK ENVIRONMENT--The student will be able to:
 - 01.01 Identify four graphic occupations.
 - 01.02 Relate the types of duties required of workers in each of four graphic occupations.
 - 01.03 Describe the working conditions of workers in each of four graphic occupations.

- 02.0 DEMONSTRATE ACCEPTABLE PROFESSIONAL AND PERSONAL SANITATION PRACTICES--The student will be able to:
 - 02.01 Demonstrate acceptable employee health habits.
 - 02.02 Identify or demonstrate acceptable personal grooming habits.

- 03.0 DEMONSTRATE SAFE WORKING PRACTICES--The student will be able to:
 - 03.01 Identify physical safety rules.
 - 03.02 Identify physical safety hazards.
 - 03.03 Recognize and correct or report physical safety hazards.
 - 03.04 Identify electrical safety rules.
 - 03.05 Identify electrical safety hazards.
 - 03.06 Recognize and correct or report electrical safety hazards.
 - 03.07 Identify fire safety rules.
 - 03.08 Identify fire safety hazards.
 - 03.09 Recognize and correct or report fire safety hazards.
 - 03.10 Identify first aid requirements.

- 04.0 DEMONSTRATE EQUIPMENT OPERATION SKILLS--The student will be able to:
 - 04.01 Follow safety rules and procedures.
 - 04.02 Identify and properly use hand tools common to graphics trades.
 - 04.03 Follow safety rules established for power equipment.
 - 04.04 Safely use power equipment common to the graphics trades.

- 05.0 PRODUCE AND INTERPRET PERTINENT TECHNICAL DOCUMENTATION--The student will be able to:
 - 05.01 Prepare thumbnail layout.
 - 05.02 Prepare rough layout.
 - 05.03 Prepare comprehensive layout including finished working dummy.
 - 05.04 Paste up mechanical elements.
 - 05.05 Operate desktop publishing equipment.

- 06.0 USE UNITS AND MEASUREMENTS RELATING TO SUBJECT OCCUPATIONS--The student will be able to:
- 06.01 Use printer's measurements to compute inches and fractions, points and picas, and decimals, percentages and proportions.
 - 06.02 Identify characteristics of printing papers to specify basic weights, sizes and grades.
- 07.0 CONSTRUCT PROJECTS OR COMPLETE TASKS--The student will be able to:
- 07.01 Complete an assigned task in pre-press operations.
 - 07.02 Complete an assigned task in offset press operations.
 - 07.03 Complete an assigned task in finishing bindery operations.
- 08.0 IDENTIFY PERTINENT MATERIALS AND PROCESSES--The student will be able to:
- 08.01 Identify by name given graphic trade's materials.
 - 08.02 Identify the uses of given graphic trades materials.
- 09.0 DEMONSTRATE APPROPRIATE COMMUNICATION SKILLS--The student will be able to:
- 09.01 Write logical and understandable statements, or phrases, to accurately fill out forms/invoices commonly used in business and industry.
 - 09.02 Read and understand graphs, charts, diagrams, and tables commonly used in this industry/occupation area.
 - 09.03 Read and follow written and oral instructions.
 - 09.04 Answer and ask questions coherently and concisely.
 - 09.05 Read critically by recognizing assumptions and implications and by evaluating ideas.
 - 09.06 Demonstrate appropriate telephone/communication skills.
- 10.0 DEMONSTRATE APPROPRIATE MATH SKILLS--The student will be able to:
- 10.01 Solve problems for volume, weight, area, circumference and perimeter measurements for rectangles, squares, and cylinders.
 - 10.02 Add, subtract, multiply and divide using fractions, decimals, and whole numbers.
 - 10.03 Determine the correct purchase price, to include sales tax for a materials list containing a minimum of six items.
 - 10.04 Demonstrate an understanding of federal, state and local taxes and their computation.
- 11.0 DEMONSTRATE APPROPRIATE UNDERSTANDING OF BASIC SCIENCE--The student will be able to:
- 11.01 Understand molecular action as a result of temperature extremes, chemical reaction, and moisture content.
 - 11.02 Draw conclusions or make inferences from data.
 - 11.03 Identify health-related problems, which may result from exposure to work related chemicals and hazardous materials, and know the proper precautions required for handling such materials.

- 12.0 DEMONSTRATE EMPLOYABILITY SKILLS--The student will be able to:
- 12.01 Locate and select employment opportunities.
 - 12.02 Understand employment capabilities.
 - 12.03 Demonstrate employment seeking skills.
 - 12.04 Demonstrate appropriate work behavior.
 - 12.05 Project a professional image.
 - 12.06 Work individually and cooperatively as a member of regular or culturally diverse team.
 - 12.07 Balance personal and professional life.
 - 12.08 Use and conserve resources and energy.
 - 12.09 Demonstrate knowledge of the "Florida Right-To-Know Law" as recorded in Florida Statutes, Chapter 442.
 - 12.10 Adapt to change.
- 13.0 DEMONSTRATE AN UNDERSTANDING OF ENTREPRENEURSHIP--The student will be able to:
- 13.01 Define entrepreneurship.
 - 13.02 Describe the importance of entrepreneurship to the American economy.
 - 13.03 Identify the necessary personal characteristics of a successful entrepreneur.
- 14.0 USE EMPLOYABILITY SKILLS TO RESEARCH JOB AND TRAINING OPPORTUNITIES--The student will be able to:
- 14.01 List 3 ways to find a job in the graphic trades.
 - 14.02 List 3 different local graphic trades job openings, the qualifications for each and the salary for each.
 - 14.03 List the local training opportunities available in 3 or more graphic trades.
- 15.0 DEMONSTRATE TEAM SKILLS--The student will be able to:
- 15.01 Participate as a responsible "team member" during laboratory activities.
 - 15.02 Work cooperatively with others.
 - 15.03 Perform a role in the shop cleanup and housekeeping schedule.

Florida Department of Education
STUDENT PERFORMANCE STANDARDS

Course Number: 8700380
Course Title: Practical Drafting
Course Credit: 1

COURSE DESCRIPTION:

- 01.0 DEMONSTRATE REALISTIC KNOWLEDGE OF OCCUPATIONS, SKILLS, AND WORK ENVIRONMENT--The student will be able to:
 - 01.01 Identify occupations utilizing drafting and/or drafting skills as a part of the job description.
 - 01.02 Relate the types of drafting duties required of employees in each of two of the identified occupations.

- 02.0 DEMONSTRATE ACCEPTABLE PROFESSIONAL AND PERSONAL SANITATION PRACTICES--The student will be able to:
 - 02.01 Demonstrate acceptable employee health habits.
 - 02.02 Identify or demonstrate acceptable personal grooming habits.

- 03.0 DEMONSTRATE SAFE WORKING PRACTICES--The student will be able to:
 - 03.01 Follow drafting room rules and procedures.

- 04.0 DEMONSTRATE EQUIPMENT OPERATION SKILLS--The student will be able to:
 - 04.01 Differentiate the Alphabet of Lines.
 - 04.02 Use various freehand and other lettering techniques.
 - 04.03 Produce freehand sketches.
 - 04.04 Use and maintain the drafting station including T-square, parallel rule and drafting or track machine.
 - 04.05 Select proper pencils and pens.
 - 04.06 Use and maintain triangles, protractors, French curves, templates and drafting instruments.
 - 04.07 Make reproductive copies.
 - 04.08 Plot a drawing generated by CAD.

- 05.0 PRODUCE AND INTERPRET PERTINENT TECHNICAL DOCUMENTATION--The student will be able to:
 - 05.01 Identify three types of plans and schematics and explain the use of each.
 - 05.02 Read and interpret three plans and/or schematics.
 - 05.03 Define working drawings.
 - 05.04 Prepare working drawings utilizing auxiliaries and/or sections.
 - 05.05 Make corrections to drawings.

- 06.0 USE UNITS AND MEASUREMENTS RELATING TO SUBJECT OCCUPATIONS--The student will be able to:
 - 06.01 Use engineers, architects and metric scales.

- 07.0 CONSTRUCT PROJECTS OR COMPLETE TASKS--The student will be able to:
- 07.01 Prepare orthographic drawings.
 - 07.02 Prepare section drawings.
 - 07.03 Prepare auxiliary drawings.
 - 07.04 Prepare drawings with dimensions.
 - 07.05 Organize and complete assigned drafting problems.
 - 07.06 Explain methods of pictorial drawing.
 - 07.07 Prepare isometric drawings.
 - 07.08 Prepare oblique drawings.
 - 07.09 Prepare perspective drawings.
 - 07.10 Explain methods of surface developments.
 - 07.11 Prepare drawings with stretchouts of prisms, cones, cylinders and pyramids.
 - 07.12 Prepare drawings involving intersecting pieces.
 - 07.13 Apply basic knowledge and skills of drafting on CAD systems by completing assigned drawings in either engineering, architectural or technical illustration classification.
- 08.0 IDENTIFY PERTINENT MATERIALS AND PROCESSES--The student will be able to:
- 08.01 Identify by name tools and materials used in drafting.
 - 08.02 Identify the uses of given tools and materials.
- 09.0 DEMONSTRATE APPROPRIATE COMMUNICATION SKILLS--The student will be able to:
- 09.01 Interpret reports and specifications.
 - 09.02 Research and prepare technical reports.
 - 09.03 Prepare visual aids and handouts and give technical report.
- 10.0 DEMONSTRATE APPROPRIATE MATH SKILLS--The student will be able to:
- 10.01 Solve arithmetic problems.
 - 10.02 Solve algebra problems.
 - 10.03 Solve geometry problems.
 - 10.04 Solve trigonometry problems.
- 11.0 DEMONSTRATE APPROPRIATE UNDERSTANDING OF BASIC SCIENCE--The student will be able to:
- 11.01 Understand molecular action as a result of temperature extremes, chemical reaction, and moisture content.
 - 11.02 Draw conclusions or make inferences from data.
 - 11.03 Identify health-related problems, which may result from exposure to work related chemicals and hazardous materials, and know the proper precautions required for handling such materials.
- 12.0 DEMONSTRATE EMPLOYABILITY SKILLS--The student will be able to:
- 12.01 Locate and select employment opportunities.
 - 12.02 Understand employment capabilities.
 - 12.03 Demonstrate employment seeking skills.
 - 12.04 Demonstrate appropriate work behavior.
 - 12.05 Project a professional image.
 - 12.06 Work individually and cooperatively as a member of regular or culturally diverse team.

- 12.07 Balance personal and professional life.
 - 12.08 Use and conserve resources and energy.
 - 12.09 Demonstrate knowledge of the "Florida Right-To-Know Law" as recorded in Florida Statutes, Chapter 442.
 - 12.10 Adapt to change.
- 13.0 DEMONSTRATE AN UNDERSTANDING OF ENTREPRENEURSHIP--The student will be able to:
- 13.01 Define entrepreneurship.
 - 13.02 Describe the importance of entrepreneurship to the American economy.
 - 13.03 Identify the necessary personal characteristics of a successful entrepreneur.
- 14.0 USE EMPLOYABILITY SKILLS TO RESEARCH JOB AND TRAINING OPPORTUNITIES--The student will be able to:
- 14.01 List 3 ways to find a job in the drafting field.
 - 14.02 List 3 different local drafting job openings, the qualifications for each and the salary for each.
 - 14.03 List the local training opportunities available in 3 or more drafting occupations.
- 15.0 DEMONSTRATE TEAM SKILLS--The student will be able to:
- 15.01 Participate as a responsible "team member" during laboratory activities.
 - 15.02 Work cooperatively with others.

Florida Department of Education
STUDENT PERFORMANCE STANDARDS

Course Number: 8700390
Course Title: Practical Aviation Careers
Course Credit: 1

COURSE DESCRIPTION:

- 01.0 DEMONSTRATE REALISTIC KNOWLEDGE OF OCCUPATIONS, SKILLS, AND WORK ENVIRONMENT--The student will be able to:
- 01.01 Identify four aviation trades occupations.
 - 01.02 Relate the types of duties required of workers in each of four aviation trades areas.
 - 01.03 Describe the working conditions of workers in each of four aviation trades areas.
- 02.0 DEMONSTRATE ACCEPTABLE PROFESSIONAL AND PERSONAL SANITATION PRACTICES--The student will be able to:
- 02.01 Demonstrate acceptable employee health habits.
 - 02.02 Identify or demonstrate acceptable personal grooming habits.
- 03.0 DEMONSTRATE SAFE WORKING PRACTICES--The student will be able to:
- 03.01 Identify physical safety rules.
 - 03.02 Identify physical safety hazards.
 - 03.03 Recognize and correct or report physical safety hazards.
 - 03.04 Identify electrical safety rules.
 - 03.05 Identify electrical safety hazards.
 - 03.06 Recognize and correct or report electrical safety hazards.
 - 03.07 Identify fire safety rules.
 - 03.08 Identify fire safety hazards.
 - 03.09 Recognize and correct or report fire safety hazards.
 - 03.10 Identify first aid requirements.
- 04.0 DEMONSTRATE EQUIPMENT OPERATION SKILLS--The student will be able to:
- 04.01 Follow safety rules and procedures.
 - 04.02 Identify and properly use hand tools common to the aviation trades.
 - 04.03 Follow safety rules established for power equipment.
 - 04.04 Safely use common aviation trades power tools and equipment.
- 05.0 PRODUCE AND INTERPRET PERTINENT TECHNICAL DOCUMENTATION--The student will be able to:
- 05.01 Interpret drawings, symbols and schematic diagrams.
 - 05.02 Interpret aviation manuals.
- 06.0 USE UNITS AND MEASUREMENTS RELATING TO SUBJECT OCCUPATIONS--The student will be able to:
- 06.01 Identify common aviation measurements.
 - 06.02 Use measuring tools to perform specified powerplant tasks.

- 06.03 Use measuring tools to perform specified airframe tasks.
- 06.04 Use measuring tools to perform electrical tasks.
- 07.0 CONSTRUCT PROJECTS OR COMPLETE TASKS--The student will be able to:
 - 07.01 Complete an assigned powerplant task.
 - 07.02 Complete an assigned airframe task.
 - 07.03 Complete an assigned electrical task.
- 08.0 IDENTIFY PERTINENT MATERIALS AND PROCESSES--The student will be able to:
 - 08.01 Identify powerplant components and system relationship.
 - 08.02 Identify airframe components and system relationship.
 - 08.03 Identify electrical components and system relationship.
- 09.0 DEMONSTRATE APPROPRIATE COMMUNICATION SKILLS--The student will be able to:
 - 09.01 Write logical and understandable statements, or phrases, to accurately fill out forms/invoices commonly used in business and industry.
 - 09.02 Read and understand graphs, charts, diagrams, and tables commonly used in this industry/occupation area.
 - 09.03 Read and follow written and oral instructions.
 - 09.04 Answer and ask questions coherently and concisely.
 - 09.05 Read critically by recognizing assumptions and implications and by evaluating ideas.
 - 09.06 Demonstrate appropriate telephone/communication skills.
- 10.0 DEMONSTRATE APPROPRIATE MATH SKILLS--The student will be able to:
 - 10.01 Solve problems for volume, weight, area, circumference and perimeter measurements for rectangles, squares, and cylinders.
 - 10.02 Add, subtract, multiply and divide using fractions, decimals, and whole numbers.
 - 10.03 Determine the correct purchase price, to include sales tax for a materials list containing a minimum of six items.
 - 10.04 Demonstrate an understanding of federal, state and local taxes and their computation.
- 11.0 DEMONSTRATE APPROPRIATE UNDERSTANDING OF BASIC SCIENCE--The student will be able to:
 - 11.01 Understand molecular action as a result of temperature extremes, chemical reaction, and moisture content.
 - 11.02 Draw conclusions or make inferences from data.
 - 11.03 Identify health-related problems, which may result from exposure to work related chemicals and hazardous materials, and know the proper precautions required for handling such materials.
- 12.0 DEMONSTRATE EMPLOYABILITY SKILLS--The student will be able to:
 - 12.01 Locate and select employment opportunities.
 - 12.02 Understand employment capabilities.
 - 12.03 Demonstrate employment seeking skills.
 - 12.04 Demonstrate appropriate work behavior.
 - 12.05 Project a professional image.

- 12.06 Work individually and cooperatively as a member of regular or culturally diverse team.
 - 12.07 Balance personal and professional life.
 - 12.08 Use and conserve resources and energy.
 - 12.09 Demonstrate knowledge of the "Florida Right-To-Know Law" as recorded in Florida Statutes, Chapter 442.
 - 12.10 Adapt to change.
- 13.0 DEMONSTRATE AN UNDERSTANDING OF ENTREPRENEURSHIP--The student will be able to:
- 13.01 Define Entrepreneurship.
 - 13.02 Describe the importance of Entrepreneurship to the American economy.
 - 13.03 Identify the necessary personal characteristics of a successful entrepreneur.
- 14.0 USE EMPLOYABILITY SKILLS TO RESEARCH JOB AND TRAINING OPPORTUNITIES--The student will be able to:
- 14.01 List 3 ways to find a job in the aviation trades.
 - 14.02 List 3 different local aviation trades job openings, the qualifications for each and the salary for each.
 - 14.03 List the local training opportunities available in 3 or more aviation trades.
- 15.0 DEMONSTRATE TEAM SKILLS--The student will be able to:
- 15.01 Participate as a responsible "team member" during laboratory activities.
 - 15.02 Work cooperatively with others.