

AUSTIN COMMUNITY COLLEGE
 Heating, Air Conditioning & Refrigeration Technology
HART1401 BASIC ELECTRICITY FOR HVAC

Course Syllabus

(Rev. 2/14/12)

Course Title: Basic Electricity for HVAC; 4 semester credit hours

Course Description: (introductory level course) principles of electricity as required by HVAC technicians including proper use of test equipment, A/C and D/C circuits, and component theory and operation.

Textbooks/Materials: AHRI "Fundamentals of HVAC/R" Carter Stanfield, David Skaves, publisher Pearson/Prentice Hall.

Tools: And a good quality digital electrical multimeter is required for testing electrical circuits and components. Since there are many choices and options, your instructor will provide valuable advice before you make this purchase.

SCANS Competencies: general academic and workforce skills necessary for entry-level employment for all American workers are the topic of a 1990 report by the Secretary of Labor's Commission on Achieving Necessary Skills (SCANS). Those skills applicable to Electricity Principles are listed here. The State of Texas Higher Education Coordinating Board requires they be included in our curriculum. They are as follows:

1.0 Resources		5.0 Technology	
1.1 Manages Time	X	5.1 Selects Technology	
1.2 Manages Money		5.2 Applies Technology to Task	
1.3 Manages Materials and Facility Resources	X	5.3 Maintains and Troubleshoots Technology	
1.4 Manages Human Resources		6.0 Basic Skills	
2.0 Interpersonal		6.1 Reading	X
2.1 Participates as a Member of a Team	X	6.2 Writing	X
2.2 Teaches Others	X	6.3 Arithmetic	X
2.3 Serves Clients/Customers		6.4 Mathematics	X
2.4 Exercises Leadership		6.5 Listening	X
2.5 Negotiates to Arrive at a Decision		6.6 Speaking	X
2.6 Works with Cultural Diversity	X	7.0 Thinking Skills	
3.0 Information		7.1 Creative Thinking	X
3.1 Acquires and Evaluates Information	X	7.2 Decision Making	X
3.2 Organizes and Maintains Information	X	7.3 Problem Solving	X
3.3 Uses Computers to Process Information	X	7.4 Mental Visualization	X