

Clarendon College  
HVAC Division  
HART 2436  
Air Conditioning Control Principles  
Spring 2011  
M-Fri. 12:00pm-6:00pm

Instructor Name: Kent Miller

Class Location: HVAC Shop, Roach Unit, Childress, Texas

Text's: 1) Modern Refrigeration and Air Conditioning by Andrew Daniel Althouse  
2) Electricity for Refrigeration, Heating and Air Conditioning by Russell E. Smith  
3) Troubleshooting and Servicing Modern Air Conditioning and Refrigeration Systems by John Tomczyk

Semester Credit Hours: 4

Course Description: Principles of electricity as required by HVAC, including proper use of test equipment, electrical circuits, and component theory and operation.

Course Objectives: Demonstrate knowledge of basic principles of electricity, electrical current, circuitry, and air conditioning devices; apply Ohm's law to electrical calculations; perform electrical continuity, voltage, and current tests with appropriate meters; and demonstrate electrical safety.

Methods of Instruction: Lecture, videotape, demonstrations, presentations, readings and hands on will be used.

Grading Policies:

The final semester grades will be figured as set in the current catalog:

90 to 100 = A 80 to 89 = B 70 to 79 = C 60 to 69 = D Below 59 = F

70% of your grade will come from chapter tests. 30% of your grade is your final exam that is made up of 4 troubleshooting tests in the Simuair and Simugas programs on the computers that are half of your final. I will randomly pick a problem for you to solve. For every part you replace that is unnecessary I will subtract 5 points from your grade. The other half of your final exam is to do a complete recovery and recharge of an air conditioner. For each mistake you make I will subtract 10 points from your grade.

Class Policies:

Attendance: You are required to be in class unless you have permission to be elsewhere. Because so much of what you will learn in this course is not found in textbooks, it is very

important to attend all classes. As in the workplace, absences must be kept to an absolute minimum if you want to be successful. If you must miss a class let me know as soon as possible. After notification, your excuse may be verified in order to determine if it is an excusable absence as determined by the college handbook and/or instructor. It is your responsibility to discuss your absence with me and find out what you need to do to make up what you missed. If you do not discuss with me your absence or complete the makeup work, you will have points deducted from your grade. Class roll will be taken at the very beginning of each class session. Tardiness is a very bad habit to develop (and would not be tolerated in the workplace). It is also disruptive to the classroom environment. Therefore, if you arrive after roll is taken, you will be counted absent. If you do not want this absence to remain on your record, it is your responsibility to discuss your tardiness with me after class is over. If you do the absence may be changed to a tardy.

Classroom Conduct: Failure to comply with lawful direction of a classroom instructor is a disruption for all students enrolled in the class. Cheating violations include, but are not limited to: (1) obtaining an examination, classroom activity, or laboratory exercise by stealing or collusion; (2) discovering the content of an examination, classroom activity, laboratory exercise, or homework assignment before it is given; (3) using an unauthorized source of information during an examination, classroom activity, laboratory exercise, or homework assignment; (4) entering an office or building to obtain unfair advantage; (5) taking an examination for another person; (6) completing a classroom activity, laboratory exercise, homework assignment, or research paper for another person; (7) altering grade records; (8) using any unauthorized form of electronic communication device during an examination, classroom activity, or laboratory exercise; (9) Plagiarism. Plagiarism is the using, stating, offering, or reporting as one's own, an idea, expression, or production of another person without proper credit.

Disciplinary actions for cheating in a course are at the discretion of the individual instructor. The instructor of that course will file a report with the Dean of Students when a student is caught cheating in the course, whether it be a workforce or academic course. The report shall include the course, instructor, student's name, and the type of cheating involved. Students who are reported as cheating to the Dean of Students more than once shall be disciplined by the Dean. The Dean will notify all involved parties within fourteen days of any action taken.