



Technical College of the Lowcountry
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ACR 251 SUPERVISED COOPERATIVE WORK EXPERIENCE

Course Description

This course includes supervised work experience at an approved site in accordance with specific documented requirements.

4 Cr (0 lect/pres, 0 lab, 4 other)

Course Focus

The student will attempt to perform all of the tasks in the field or an approved work site.

Text and References

There is no required text. This is a supervised work co-op course.

Course Goals

The following list of course goals will be addressed in the course. These goals are directly related to the performance objectives. (*designates a CRUCIAL goal)

1. report to work
2. address your boss
3. review assigned tasks
4. obtain required parts
5. obtain required tools
6. navigate to service call
7. address home/business owner
8. listen to the problem
9. check air filter
10. adjust the thermostat
11. analyze system operation

12. remove service panels
13. use volt meter
14. evaluate high voltage
15. read low voltage
16. verify amp draws
17. diagnose system malfunction
18. repair broken electrical connector
19. find resistance values
20. identify heat pump components
21. practice safe work habits
22. prioritize sequence of work
23. access air handler
24. adjust air flow
25. clean indoor coil
26. clean outdoor coil
27. add refrigerant to system
28. calculate system subcooling
29. calculate system superheat
30. change fan motor
31. write model number
32. write serial number
33. mark up equipment cost
34. make job invoice
35. loosen stuck fan blade
36. match equipment for efficiency
37. lubricate motor bearings
38. repair refrigerant leak
39. maintain clean van
40. replace system compressor
41. measure standing pressure
42. practice brazing copper
43. measure compressor amp draw
44. evacuate with vacuum pump
45. install indoor unit
46. install outdoor unit
47. flush system lines
48. balance refrigerant charge
49. connect high voltage wiring
50. connect low voltage wiring
51. change air filter
52. check electrical connections
53. inventory tool pouch
54. isolate refrigerant leak
55. lift outdoor unit

56. measure refrigerant pressure drop
57. repair compressor wiring
58. troubleshoot failed capacitor
59. troubleshoot failed contactor
60. weigh in refrigerant

Student Contributions

The student will be required to document all the work performed in the field or an approved work site. The student will have the company supervisor sign off on the tasks performed.

Course Evaluation

There will be a total of sixty objectives for the student to accomplish. There are 100 points that a student can earn. Grading is as follows:

Course Schedule

The student will work in the field or at another approved site for a total of 16 hours per week.

Approved by: *Kenneth Flick* Developed/Revised: 3/5/2013
Ken Flick, Division Dean for Business/Industrial Technology

ADA Statement

The Technical College of the Lowcountry provides access, equal opportunity and reasonable accommodation in its services, programs, activities, education and employment for individuals with disabilities. To request disability accommodation, contact the counselor for students with disabilities at (843) 525-8228 during the first ten business days of the academic term.

ACADEMIC MISCONDUCT

There is no tolerance at TCL for academic dishonesty and misconduct. The College expects all students to conduct themselves with dignity and to maintain high standards of responsible citizenship.

It is the student's responsibility to address any questions regarding what might constitute academic misconduct to the course instructor for further clarification.

The College adheres to the Student Code for the South Carolina Technical College System. Copies of the Student Code and Grievance Procedure are provided in the *TCL Student Handbook*, the Division Office, and the Learning Resources Center.

ATTENDANCE

- The College's statement of policy indicates that students must attend ninety percent of total class hours or they will be in violation of the attendance policy.
 - Students not physically attending class during the first ten calendar days from the start of the semester must be dropped from the class for NOT ATTENDING.
 - Students taking an online/internet class must sign in and communicate with the instructor within the first ten calendar days from the start of the semester to indicate attendance in the class. Students not attending class during the first ten calendar days from the start of the semester must be dropped from the class for NOT ATTENDING.
 - Reinstatement requires the signature of the division dean.
- In the event it becomes necessary for a student to withdraw from the course *OR if a student stops attending class*, it is the student's responsibility to initiate and complete the necessary paperwork. Withdrawing from class may have consequences associated with financial aid and time to completion.
- When a student exceeds the allowed absences, the student is in violation of the attendance policy. The instructor MUST withdraw the student with a grade of "W", "WP", or "WF" depending on the date the student exceeded the allowed absences and the student's progress up to the last date of attendance

or

under extenuating circumstances and at the discretion of the faculty member teaching the class, allow the student to continue in the class and make-up the work. This exception must be documented at the time the allowed absences are exceeded.

- Absences are counted from the first day of class. There are no "excused" absences. All absences are counted, regardless of the reason for the absence.
- A student must take the final exam or be excused from the final exam in order to earn a non-withdrawal grade.
- A copy of TCL's STATEMENT OF POLICY NUMBER: 3-1-307 CLASS ATTENDANCE (WITHDRAWAL) is on file in the Division Office and in the Learning Resources Center.

HAZARDOUS WEATHER

In case weather conditions are so severe that operation of the College may clearly pose a hardship on students and staff traveling to the College, notification of closing will be made through the following radio and television stations: WYKZ 98.7, WGCO 98.3, WGZO 103.1, WFXH 106.1, WWVV 106.9, WLOW 107.9, WGZR 104.9, WFXH 1130 AM, WLVA 101.1, WSOK 1230 AM, WAEV 97.3, WTOG TV, WTGS TV, WJWJ TV, and WSAV TV. Students, faculty and staff are highly encouraged to opt in to the Emergency Text Message Alert System. www.tcl.edu/textalert.asp

Emergency Text Message Alert

Students, faculty and staff are highly encouraged to opt in to the Emergency Text Message Alert System. Participants receive immediate notification of emergency events and weather cancellations via text messaging on their cell phones. Participants can also opt in to receive non-emergency news and announcements. Go to www.tcl.edu. On the homepage, click on "emergency TextAlert at TCL" and fill out the form or go to www.tcl.edu/textalert.asp