EGT 152
FUNDAMENTALS OF CAD

Course Description
This course includes a related series of problems and exercises utilizing the computer graphics station as a drafting tool. Advance CAD drafting skills acquired using AutoCAD Software.
3 Cr (3 lect/pres, 0 lab, 0 other)

Course Focus
Upon completion of the course a student will be able to continue to work with new commands and command structures, and will perform advanced two-dimensional drawings. The course will teach dimensioning drawing and producing hard copies of it.

Text and References
Following text book will be used as a reference until summer of 2014. The textbook changes every year based on the software version.
Harnessing AutoCAD 2013, By: Stellman and Krishnan, AutoCAD Press, Albany, NY 12212

Course Goals
The following list of course goals will be addressed in the course. These goals are directly related to the performance objectives.

1. draw center mark
2. draw linear dimensioning
3. control layer visibility
4. scale views
5. create floating viewports
6. set layout
7. plot model space
8. plan plotted sheet
9. use annotative scaling
10. edit dimension text
11. create plot style tables
12. create associative dimensioning
13. use quick dimensioning
14. draw baseline dimensioning
15. define ordinate dimensioning
16. compose geometric tolerance
17. create annotated leaders
18. draw arc length dimensioning
19. dimension arc and circles
20. draw angular dimensioning
21. draw aligned dimensioning
22. create dimension styles
23. create block references
24. preview design center images
25. use design center content area
26. locate design center files
27. explore design center
28. explore external references
29. use parametric constrain dynamic block
30. create dynamic blocks
31. use divide command
32. plot paper space layout
33. convert block references to drawings
34. explore online design center
35. control dimension automatically
36. create dimensional formulas
37. use auto constrain functionality
38. apply dimensional constraint
39. apply geometric constraints
40. control hatch visibility
41. modify hatch patterns
42. create hatch patterns
43. configure plotters
44. change plot style properties
45. define attributes

**Student Contributions**
Each student will spend approximately 2.5-5 hours per week preparing for class and completing assignments to turn in weekly.

Each week students will turn in assignments as specified on Blackboard. In addition, chapter tests are to be completed as assigned. Students will also complete a final exam/project to demonstrate their knowledge of the material.

**Student Attendance Policy:** See student handbook within the TCL Catalog.

**Course Evaluation:**
The grading scale is as follows:
Assignments and class work = 50%, Midterm Exam = 25%, and Final Exam = 25%.
90 - 100 = A   80 - 89 = B   70 - 79 = C   60 - 69 = D   Below 60 = F

**Course Schedule**
The class meets for 2.5 lecture/presentation hours per week. Course content will be taught in the order that the content goals are presented in the syllabus.

Approved by:  Kenneth Flick  
Developed/Revised:  8/15/2013

Ken Flick, Division Dean for Business/Industrial Division
**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. Reinstatement requires the signature of the division dean.
- 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 withdrawal 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, WGRZ 104.9, WFXH 1130 AM, WLH 101.1, WSOK 1230 AM, WAEV 97.3, WTOC 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](http://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 cancelations via text messaging on their cell phones. Participants can also opt in to receive non-emergency news and announcements. Go to [www.tcl.edu](http://www.tcl.edu). On the homepage, click on “emergency Text Alert at TCL” and fill out the form or go to [www.tcl.edu/textalert.asp](http://www.tcl.edu/textalert.asp)