Eastfield College
Career Technologies Division

Spring 2015
Basic Computer Aided Drafting
DFTG 1409.43426 – 4 Credit Hours

Instructor: Tina Goitia

Contact Information:
Office: T-143
Phone: 972-860-7143
tinagoitia@yahoo.com
Email address: Email for Appointment

Course Description
DFTG 1409 is an introduction to basic computer-aided drafting. Emphasis is placed on drawing setup; creating and modifying geometry; storing and retrieving predefined shapes; placing, rotating and scaling objects, adding text and dimensions, using layers, coordinating systems; as well as input and output devices. This course is cross-listed as DFTG 1309. The student may register for either DFTG 1409 or DFTG 1309, but may receive credit for only one of the two. (2 Lec., 6 Lab.)

Textbooks and Other Course Materials:
Computer, Internet access, Software: Windows Media Player and AutoCAD 2014, small spiral notebook, calculator and at least a 2Gb flash drive.

Developmental Courses
The Texas Success Initiative (TSI) is a statewide program designed to ensure that students enrolled in Texas public colleges and universities have the basic academic skills needed to be successful in college-level course work. The TSI requires assessment, remediation (if necessary), and advising of students who attend a public college or university in the state of Texas. The program assesses a student’s basic academic skills in reading, writing, and math. Passing the assessment is a prerequisite for enrollment in many college-level classes such as English 1301/1302, History 1301/1302, Math 1414, etc. Students who do not meet assessment standards may complete prerequisite requirements by taking developmental courses in the deficient area and passing them with a grade of C or higher. In some cases retesting will also be required. It is up to each student to be aware and informed about requirements that are subject to change. Additional information is available from the TSI Office.
https://www1.dcccd.edu/cat0910/admiss/tsi.cfm?loc=4
Course Objectives:

- Describe and use the basic terms, concepts, and techniques of computer-aided drafting.
- Set up drawings, use drawing aids, save drawings, and get help when needed.
- Draw lines, basic shapes, and geometric constructions, and edit drawings.
- Use the AutoCAD calculators and filters.
- Place text on drawings and Insert and edit tables.
- Use display options to increase drawing flexibility.
- Use basic and advanced AutoCAD editing tools.
- Obtain information about drawings and work with drawing files.
- Use proper drafting standards and practices.

Evaluation Procedures:

90% of your grade for the course is based on drawing assignments, 10% is based on quizzes and the final exam.

Obtaining Final Course Grades Using eConnect

Final Grade Reports are no longer mailed. Convenient access is available online at www.econnect.dcccd.edu. Use your identification number when you log onto eConnect, an online system developed by the DCCCD to provide you with timely information regarding your college record. Your grades will also be printed on your Student Advising Report, which is available in the Admissions Office.

Eastfield College Email Policy

Faculty and students must have and use a DCCCD account for all correspondence relating to academic coursework. For information on setting up a DCCCD student email account go to: https://www1.dcccd.edu/netmail/input_ssn.cfm

Attendance Policy:

On line students are required submit all assignments due prior to the 11th day of class in order to verify their attendance. If all due assignments are not submitted by February 1st, 2014 the student risks the loss of financial aid benefits.
Course Outline:

Drawing Due Date:

Drawings due dates are posted on Blackboard. Once graded, the student will have three days to correct the drawing and resubmit it for a maximum score of 90. An additional 5 points will be taken off for each day late thereafter. Drawings turned in late are not eligible to be resubmitted. The final exam and any quizzes are due the day assigned, no exceptions.

Title all and save work as follows: SP15.DFTG1409.First Initial.Last Name.Drawing Name. Add revised to the title if it is your second submission of work.

Title the drawing, file, and e-mail with:
SP15.DFTG.1409.T.Goitia.P5.2.revised. Email Completed work to: tinagoitia@yahoo.com.

Locate DFTG 1409 Assignments Below and on Blackboard - April 16th is the Last Day to Withdraw from the Course

Financial Aid Statement

Students who are receiving any form of financial aid should check with the Financial Aid Office prior to withdrawing from classes. Withdrawals may affect your eligibility to receive further aid and could cause you to be in a position of repayment for the current semester. Students who fail to attend or participate after the drop date are also subject to this policy.

All assignments due must be submitted by the eleventh class day on February 1st, 2015.

Financial Aid Statement for Distance Learning Classes

If you are receiving Financial Aid grants or loans and are enrolled in a Distance Learning class, you must show participation in this class prior to the certification date by either e-mailing or contacting the instructor or logging on to eCampus. Do not drop or stop attending any class without consulting the Financial Aid Office. Changes in your enrollment level and failing grades may require that you repay financial aid funds.

Repeating This Course: (Third Attempt to Enroll in a Course)

Effective for Fall Semester 2005, the Dallas County Community Colleges will charge additional tuition to students registering the third or subsequent time for a course. All third and subsequent attempts of the majority of credit and Continuing Education/Workforce Training courses will result in additional tuition to be charged. Developmental Studies and some other courses will not be charged a higher tuition rate. Third attempts include courses taken at any of the Dallas County Community Colleges since the Fall 2002 Semester. See Third Attempt to Enroll in a Course at: http://www.dcccd.edu/thirdcourseattempt/
Academic Honesty Statement

Scholastic dishonesty is a violation of the Code of Student Conduct. Scholastic dishonesty includes, but is not limited to, cheating on a test, plagiarism, and collusion.

As a college student, you are considered a responsible adult. Your enrollment indicates acceptance of the DCCCD Code of Student Conduct published in the DCCCD Catalog at http://www1.dcccd.edu/cat0506/ss/code.cfm.

Academic dishonesty includes, but is not limited to, cheating on tests, plagiarism and collusion. Cheating includes copying from another student’s test or homework paper, using materials not authorized, collaborating with or seeking aid from another student during a test, knowingly using, buying, selling, stealing, or soliciting the contents of an unadministered test, and substituting for another person to take a test. Plagiarism is the appropriating, buying, receiving as a gift, or obtaining by any means another’s work and the unacknowledged submission or incorporation of it in one’s own written work. Collusion is the unauthorized collaboration with another person in preparing written work for fulfillment of course requirements. Academic dishonesty is a serious offense in college. You can be given a failing grade on an assignment or test, can be failed for the class, or you can even be suspended from college.

Food and Drink Policy

Food, drinks, and tobacco products are prohibited in Eastfield College classrooms.

If you are teaching in a non-lab classroom, you may allow for food and drink, but you must comply with college requirement of a statement of responsibility from each student. See “Food and Drink Policy” attached as .pdf file.

ADA Statement

Students with a physical, mental or learning disability who require accommodations should contact the college Disability Services Office in C237. Call 972.860.8348 or email efcdso@dcccd.edu. For more information: http://www.eastfieldcollege.edu/SSI/DSO/index.html.

Religious Holidays

Absences for observance of a religious holy day are excused. Notification of the absence must be given to the instructor in writing at least two weeks prior to the date of the holy day. A student whose absence is excused to observe a religious holy day is allowed to contract with the instructor to take a make-up examination or complete an assignment within a mutually agreed upon time after the absence.
Withdrawal Policy—The last day to withdraw is April 16, 2015.

If you are unable to complete this course, it is your responsibility to withdraw formally. The withdrawal request must be received in the Registrar’s Office by April 16, 2015. Failure to do so will result in your receiving a performance grade, usually an “F.” If you drop a class or withdraw from the college before the official drop/withdrawal deadline, you will receive a “W” (Withdraw) in each class dropped. For more information about drop deadlines, refer to the current printed Credit Class Schedule, contact the Admissions/Registrar’s Office at 972-860-7167 (Room C119), or contact the division office.

STOP BEFORE YOU DROP

For students who enrolled in college level courses for the first time in the fall of 2007, Texas Education Code 51.907 limits the number of courses a student may drop. You may drop no more than 6 courses during your entire undergraduate career unless the drop qualifies as an exception. Your campus counseling/advising center will give you more information on the allowable exceptions. Remember that once you have accumulated 6 non-exempt drops, you cannot drop any other courses with a “W”. Therefore, please exercise caution when dropping courses in any Texas public institution of higher learning, including all seven of the Dallas County Community Colleges. For more information, you may access: https://www1.dcccd.edu/coursedrops

Family Educational Rights and Privacy Act of 1974 (FERPA)
In compliance with the Family Educational Rights and Privacy Act of 1974 (FERPA), the College may release information classified as “directory information” to the general public without the written consent of the student. Directory information includes: (1) student name, (2) student address, (3) telephone numbers, (4) date and place of birth, (5) weight and height of members of athletic teams, (6) participation in officially recognized activities and sports, (7) dates of attendance, (8) educational institution most recently attended, and (9) other similar information, including major field of student and degrees and awards received. Students may protect their directory information at any time during the academic year. If no request is filed, directory information is released upon written inquiry. No telephone inquiries are acknowledged. No transcript or academic record is released without written consent from the student, except as specified by law.

Classroom Etiquette

Cell phones should be turned off when using the CAD Lab. Abuse or profane languages are not allowed.

The instructor reserves the right to amend this syllabus as necessary.
Day 1 AutoCAD Software

- Statistics Tracking

Attached Files:
- Autodesk Software.wmv (3.088 MB)

Go to: http://www.autodesk.com/education/free-software/all and download AutoCAD if you do not already have it installed. I will be running 2014 but if you have a little bit older version it should work fine.

Assignment 1 Title Block Assignment & Chapter 1 Due Date: 1.24.15
- Form 3 Titleblock (2).jpg (23.609 KB)
- Size A Sheet (2).jpg (43.288 KB)
- Size A Title Block Activity.wmv (12.922 MB)

The Titleblock assignment serves as verification that you are actively enrolled in the class. Failure to submit this assignment prior to the deadline may result in loss of Financial Aid benefits.

Read Chapter 1. The AutoCAD software structure, drawing planning, interface items, dialog boxes, selecting tools, starting and exiting AutoCAD, getting help, and commonly used terms and definitions.

Tool: HELP

Assignments: Read Chapter 1, View Size A Title Block Activity Video, Submit the drawing as: Titleblock.

Assignment 2 Chapter 2 Due Date: 1.31.15
- Shortcuts.jpg (530.428 KB)
- Basic AutoCAD Lines and Circles.wmv (8.045 MB)
- Basic AutoCAD Video 1.wmv (8.986 MB)
- WBLOCKFINAL.wmv (6.14 MB)

Read Chapter 2. Starting and opening a drawing, drawing file names, working with multiple drawings, setting up a drawing template, working with grid and snap modes, and changing units

Tools: QNEW, SAVEAS, QSAVE, OPEN, CLOSE, CLOSEALL, DWGPROPS, LIMITS, UNITS

Assignments: Watch Basic AutoCAD Videos, Read Chapter 2 and work through the Chapter 2 Exercises at: http://www.g-wlearning.com/cad/9781619604469/student/index.htm (self-study activities)

Submit Cube Drawing as outlined in the videos. Email the cube drawing to tinagoitia@yahoo.com.
Watch wbblock video and submit the Cube Drawing with an Isometric block inserted to tinagoitia@yahoo.com.

Assignment 3 - Chapter 3 Due Date 2.7.15
- Book 3-15.jpg (119.983 KB)
- Book 3-13.jpg (124.344 KB)
- 1409 Chapter 3.wmv (21.829 MB)
- 3-13 directions.wmv (4.12 MB)
Read Chapter 3. Point entry methods, drawing lines, coordinate display, editing functions, dynamic input, undoing the effects of tools, and redoing undone operations

Tools: LINE, GRID, DSETTINGS, SNAP, ORTHO, ERASE, ERASE, U, UNDO, REDO

Assignments: Chapter 3 Video, Companion Website Activities Exercise 3-3, 3-4 and 3-5. You only need to complete the first five steps and title each assignment as EX3-3, EX3-4, EX3-5. [http://www.g-wlearning.com/cad/9781619604469/student/index.htm](http://www.g-wlearning.com/cad/9781619604469/student/index.htm) (Self Study Activity)

Student Problems (Book) P3-13, P3-15 – Website Exercises 3-3, 3-4, 3-5 to be turned in to instructor complete with border and titleblock

**↓ Assignment 4 - Chapter 4 Due Date: 2.14.15**

- [DFTG 1409.4426 Chapter 4.wmv](#) (13.532 MB)
- [Gasket.jpg](#) (190.517 KB)
- [Book 4-3.jpg](#) (157.585 KB)
- [Book 4-7.jpg](#) (141.021 KB)
- [Book 4-2.jpg](#) (180.772 KB)

**Read Chapter 4.** Drawing circles, arcs, ellipses, polygons, rectangles, polylines, splines, and donuts. Drawing rectangles with chamfered corners and rounded corners. Work through the Website Companion Exercises on Your Own - Do Not Submit these Exercises for a Grade. Exercise 4-1 - 4-13. [http://www.g-wlearning.com/cad/9781619604469/student/index.htm](http://www.g-wlearning.com/cad/9781619604469/student/index.htm)

Tools: CIRCLE, ARC, ELLIPSE, PLINE, POLYGON, RECTANG, DONUT, SPLINE

Assignments: Chapter 4 Video

Student Problems (Book) P4-2, P4-3, P4-7 and the Gasket Drawing (Attached on Blackboard) – to be turned in to instructor complete with border and titleblock

**↓ Assignment 5 - Chapter 5 Due Date: 2.21.15**

- [Standard Layer Properties.rtf](#) (15.118 KB)
- [DFTG 1409.4426 Chapter 5.wmv](#) (14.211 MB)
- [Templates and Screenshots.wmv](#) (7.863 MB)
- [Book 5-8.jpg](#) (622.975 KB)

**Read Chapter 5.** Line standards, drawing objects on separate layers, creating and managing layers, assigning linetypes and linewidths, changing object properties, using DesignCenter

Tools: LAYER, LINETYPE, LINETRACE, LAYERSTATE, ADCENTER

Assignments: View the Chapter 5 Video over Layers. View the Template and Screenshot Assignment Video. Open the Title Block Assignment from Week One. Add layers to the drawing using the Standard Layer Properties Handout. Use the Titleblock drawing to Create a Template. Name it A Size Titleblock. Create a Screenshot of the template file. Title the assignment: Template Screen Shot A

Student Problems (Book) P5-8 – to be turned in to instructor complete with layers, border and titleblock Problem 5-8 (In Book and Attached) Draw the plot plan shown using the layers shown in the table. Draw objects proportionate to the drawing shown. Use the 1409 Size A Titleblock Template. Make sure to use layers and Save As: P5-8.dwg.

**↓ Assignment 6 - Chapter 6 Due Date: 2.28.15**

- [Exercise 6-7.pdf](#) (45.299 KB)
- [db_samp.dwg](#) (249.188 KB)
- [6-7 Viewports.wmv](#) (1.492 MB)

**Read Chapter 6.** Using tools transparently, realtime zooming and panning, using the navigation bar and navigation wheels; creating views; model space and tiled viewports; making a print

Tools: ZOOM, PAN, REGEN, REGENALL, VIEWPORTS, NAVBAR, NAVSWHEEL, NAVVCUBE, DRAWORDER, ISOLATEOBJECTS, UNISOLATEOBJECTS, VIEW, VPORTS

Assignments: Companion Website Student Exercise 6-7

Student Exercise 6-7 to be turned in to instructor (db_samp.dwg is attached) no titleblock required use multtext to title drawing.
Assignment 7 Chapter 7 Due Date: 3.7.15

- DFTG 1409 Chapter 7.wmv (25.957 MB)
- Book 8-1.jpg (256.977 KB)
- 7-12 Handwheel.wmv (1.401 MB)
- Form 5 Titleblock.jpg (37.984 KB)
- Book 7-12.jpg (429.75 KB)
- Book 7-1.jpg (225.67 KB)

Read Chapter 7. Object snap modes, using temporary tracking, and AutoTrack
Tool: OSNAP
Assignments: Chapter 7 Video - This a a fairly long video, however it will also provide information for your final exam. CD Student Exercises 7-2 (Self Study)
Student Problems (Book) P-7-1, P 7-12 – to be turned in to instructor complete with layers, line types, border and titleblock. P 7-12 is not in the book. It is attached on Blackboard.

Quiz: Chapter 8 Problem P8-1: Create a Multiview Drawing: Front, Top & Right Side on an ANSI B Paper Size. Create a border and titleblock, set up proper layers, include line types and dimensions. Format the dimensions to 2 points of precision. There is a form 5 title block attached.

Assignment 8 - Chapter 8 Due Date: 3.21.15

- How to Determine the Front View2014.wmv (1.887 MB)
- Student Exercise 8-5.jpg (654.227 KB)
- Student Exercise 8-3 Example Drawing.jpg (639.793 KB)
- Test 2.jpg (450.218 KB)
- How to Center a Drawing and Select Paper Size.wmv (6.79 MB)
- Student Exercise 8-3.jpg (664.412 KB)

Read Chapter 8. Geometric constructions, dividing objects, drawing points, and using construction lines to assist in creating Multiview drawings and auxiliary views
Tools: OFFSET, POINT, DDTYPE, DIVIDE, MEASURE, XLINE, RAY
Assignments: CD Student Exercises P8-3, 8-5 - to be turned in to instructor complete with layers, border and titleblock. See the title block specifications folder below to determine which title block to use.

Title Block Specifications

Assignment 9- Chapter 9 Due 3.28.15

- Student Exercise 9-6.jpg (741.384 KB)
- Book 9-12.jpg (331.833 KB)
- Student Exercise 9-1.jpg (772.155 KB)

Read Chapter 9. Text standards, annotative styles, drawing scale factors, developing and using text styles, forming columns; placing multiple-line text on a drawing
Tools: SCALELISTEDIT, STYLE, RENAME, MTEXT
Assignments: CD Student Exercises P9-1 & 9-6 - Self Study Activity

To be turned in: Complete P 9-12 and submit drawing to tinagoitia@yahoo.com.

Assignment 10- Chapter 10 Due Date 4.4.15

- P10-13.jpg (441.483 KB)
Read Chapter 10. Placing single-line text on a drawing, creating special text characters, inserting fields, and checking spelling

Tools: TEXT, FIELD, UPDATEFIELD, SPELL, FIND, SCALETEXT, JUSTIFYTEXT, PROPERTIES

Assignments: CD Student Exercises 10-1 - (Self Study Activity)
Student Problems (Book) P10-7 (Interior Finish Schedule) & P10-13 (Sheet Block & Parts List) – to be turned in to instructor complete with layers, border and titleblock

Week 11 - Chapter 11 Overview

Chapter 12 Assignments Due Date: 4.11.15

Read Chapter 12. Drawing chamfers and fillets, using editing tools, joining, scaling, and exploding objects

Tools: FILLET, CHAMFER, BREAK, JOIN, EXTEND, TRIM, STRETCH, LENGTHEN, SCALE, EXPLODE

Assignments: CD Student Exercises 12-5
Student Problems (Book) P-12-12 - to be turned in to instructor complete with layers, border and titleblock. Turn in both assignments. (12-5 & 12-12)

Assignment 12 - Chapter 13 Due Date: 4.18.15

Read Chapter 13. Moving and copying objects, creating mirror images, aligning objects, arraying objects

Tools: MOVE, ROTATE, ALIGN, COPY, MIRROR, REVERSE, ARRAY

Assignments: Student Problems (Book) P-12-6, P12-10 - to be turned in to instructor complete with layers, border and titleblock. (Attached)

Assignment 13 - Chapters 16, 17 & 18 Dimensioning Due Date: 4.25.15

Read Chapters 16, 17 & 18. Dimension Standards and Styles, Linear and Angular Dimensioning, Editing Dimensions

Much of this material has been covered throughout the class. Proper dimensioning styles should be studied on your own. The majority of each chapter has illustrated examples of proper dimensioning principals. Review the material, handout and interactive activities so that you will have a good working knowledge of proper dimensioning techniques. Proper Dimensioning Handout and PowerPoint Attached
View these interactive activities:
http://www.engineeringessentials.com/ege/dim/dim_page3_ex5.htm

Assignments: (Book) P 8-18 (Draw as multiview drawing) P18-18 (Include table in drawing) add proper dimensions - to be turned in to instructor complete with layers, border, titleblock, and dimensions in AutoCAD format

Assignment 14 Isometrics Due Date 5.2.15
- P2-12.jpg (278.607 KB)
- hatch dialog and angles.jpg (316.746 KB)
- How to Gradient Hatch.wmv (3.475 MB)
- P1-30.jpg (212.686 KB)
- HOW TO DRAW AN ISOMETRIC.wmv (6.382 MB)
  Draw the following problems as isometrics and gradient shade them. These problems are not in the book.

P1-30 (Title Iso1) & P 2-12 (Title Iso2)
Title the drawings and e-mail as ISO 1 and ISO 2.

Assignment 15 - Final Exam Due 5.9.15
- DFTG 1409 Final Exam.jpg (1.077 MB)
  The final exam is attached. Determine a paper size, create a border and titleblock. Determine the best way to orient the part in order to best illustrate the front, top, and right side. Develop a multiview and shaded isometric drawing based on the 3D drawing. Set up layers, illustrate line types, and use proper dimensioning. Further directions are outlined on the drawing.