

Brazosport College

Syllabus for DFTG 1309 Basic Computer- Aided Drafting (AutoCAD)

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COURSE DESCRIPTION

Introduction to the principles of drafting to include terminology and fundamentals, including size and shape descriptions, projection methods, geometric construction, sections, auxiliary views, and reproduction processes.

PREREQUISITES

Co-requisite: DFTG 1305 Technical Drafting

COURSE OBJECTIVES

- The student will comprehend the use of CAD hardware and software to create, display, and plot working drawings.
- The student will demonstrate the proper use of equipment; operate and adjust input and output devices; start and exit a software program; demonstrate file management techniques; perform drawing setup;
- Construct geometric figures, text, utilize editing commands; control coordinates and scales, use layering techniques and use associative dimensioning.
- Define basic computer aided design terms, identify: dialogue boxes parts, sidebar and pull down menus.
- The student will use inquiry and measure commands. The student will be allowed references. The student will apply commands to creation of project drawing.
- The students will Use Text Associated Commands. The student will be allowed references except on exams. The student will apply commands to creation of project drawing.
- The student will apply plotting and printing commands. The student will not be allowed references. The student will define terms associated with plotting and printing techniques.
- The student will define special entity and utility terms. The student will apply commands to creation of project drawings.

STUDENT LEARNING OUTCOMES

Secretary's Commission on Achieving Necessary Skills (SCANS): "Fundamental Skills" and "Workplace Competencies"

A Three-Part Foundation

Basic Skills: Reads, writes, performs arithmetic and mathematical operations, listens and speaks

- A. [Reading](#)--locates, understands, and interprets written information in prose and in documents such as manuals, graphs, and schedules

Thinking Skills: Thinks creatively, makes decisions, solves problems, visualizes, knows how to learn, and reasons

- C. **Problem Solving-** Recognizes that a problem exists (i.e., there is a discrepancy between what is and what should or could be), identifies possible reasons for the discrepancy, and devises and implements a plan of action to resolve it. Evaluates and monitors progress, and revises plan as indicated by findings.

Personal Qualities: Displays responsibility, self-esteem, sociability, self-management, and integrity and honesty

- A. [Responsibility](#)--exerts a high level of effort and perseveres towards goal attainment

Five Workplace Competencies

Resources: Identifies, organizes, plans, and allocates resources

- A. *Time*--Selects goal-relevant activities, ranks them, allocates time, and prepares and follows schedules

Interpersonal: Works with others

- A. *Participates as Member of a Team*--contributes to group effort
- B. *Teaches Others New Skills*

Information: Acquires and uses information

- A. *Acquires and Evaluates Information*

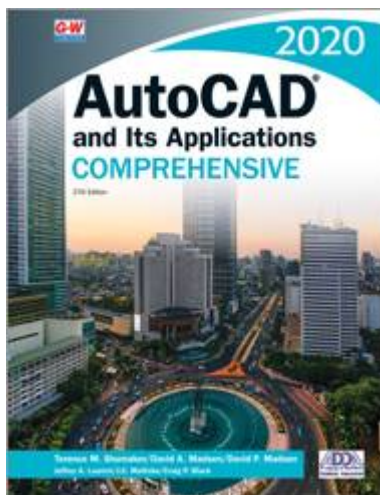
Systems: Understands complex inter-relationships

- C. *Improves or Designs Systems*--suggests modifications to existing systems and develops new or alternative systems to improve performance

Technology: Works with a variety of technologies

- A. *Selects Technology*--chooses procedures, tools or equipment including computers and related technologies
- B. *Applies Technology to Task*--Understands overall intent and proper procedures for setup and operation of equipment

TEXTBOOK OR COURSE MATERIAL INFORMATION



AutoCAD and Its Applications- Comprehensive 2015
Goodheart-Wilcox Publisher
Author- Schumaker
ISBN: 978-1-63563-866-0

Required course materials are available at the Brazosport College bookstore, on campus or online at <http://www.brazosport.edu/bookstore>. A student of this institution is not under any obligation to purchase a textbook from the college bookstore. The same textbook is/may also be available from an independent retailer, including an online retailer.

For Online Courses: Contact the Brazosport College Bookstore with a credit card for course materials. Phone: 979.230.3651. Fax: 979.230.3653.

Email: bookstore@brazosport.edu. Website: <http://www.brazosport.edu/bookstore>

LAB REQUIREMENTS

3 SCH, 2 hours lecture, 2 hours lab per week.

STUDENTS WITH DISABILITIES

Brazosport College is committed to providing equal education opportunities to every student. Brazosport College offers services for individuals with special needs and capabilities including counseling, tutoring, equipment, and software to assist students with special needs. Please contact the Special Populations Counselor, 979.230.3236, for further information.

ACADEMIC HONESTY

Brazosport College assumes that students eligible to perform on the college level are familiar with the ordinary rules governing proper conduct including academic honesty. The principle of academic honesty is that all work presented by you is yours alone. Academic dishonesty including, but not limited to, cheating, plagiarism, and collusion shall be treated appropriately. Please refer to the Brazosport College Student Guide for more information. This is available online at <http://www.brazosport.edu>. Click on the CATALOGS AND SCHEDULES link under STUDENTS.

Academic dishonesty violates both the policies of this course and the Student Code of Conduct. In this class, any occurrence of academic dishonesty will be referred to the Dean of Student Services for prompt adjudication, and will, at a minimum, result in **Zero on assignment, with no option to make up**. Sanctions may be imposed beyond your grade in this course by the Dean of Student Services.

ATTENDANCE AND WITHDRAWAL POLICIES

Your attendance is required to achieve success in this course. It is the student's responsibility to attend class on time and prepared. It is the student's responsibility for add/ drop withdraws from course. See Current Brazosport College Student Guide for information.

COURSE REQUIREMENTS AND GRADING POLICY

Each student will spend at least 4 hours per week preparing for class. The student will have an opportunity to evaluate the instructor. You are expected to complete all assignments in a timely manner. Student grades will be assigned according to the following criteria:

○ DRAWING PROJECTS	40%
○ UNIT EXAMS	20%
○ FINAL PROJECT	20%
○ FINAL EXAM	20%

Grades of A through F will be assigned according to college policy.

TESTING

There will be tests, exams, quizzes to be completed, and you will have ample time to prepare for each of these. Tests, exams or quizzes are expected to be completed on the scheduled day, and you will receive your test material back for future reference.

MAKE-UP POLICY

Late work will not generally be accepted. Make up assignments and make up tests will be accepted on an independent, per student basis as the instructor sees fit.

STUDENT RESPONSIBILITIES

Students are expected to fully participate in this course. The following criteria are intended to assist you in being successful in this course:

- understand the syllabus requirements
- use appropriate time management skills
- communicate with the instructor
- complete course work on time, and
- utilize online components (such as Desire2Learn) as required.

PROJECTS, ASSIGNMENTS, PORTFOLIOS, SERVICE LEARNING, INTERNSHIPS, ETC.

- define basic computer aided design terms
- identify dialogue boxes parts
- identify sidebar and pull down menu parts
- use file creating and saving procedures
- apply basic drawing setup tools
- use basic line entity creation commands
- use basic editing commands
- use basic command recall commands
- use basic view and display commands
- define basic drafting dimensioning terms
- apply basic dimensioning commands
- use geometry and construction commands
- use basic circle and arc entity creation commands
- use polygon, ellipse and special entity creation commands
- use snap, ortho mode commands
- use circular dimensioning commands
- use intermediate editing commands
- use inquiry and measure commands
- use text associated commands
- define plotting and printing terms
- apply plotting and printing commands
- define symbol creation and manipulation terms
- use symbol creation and manipulation commands
- define drawing and file manipulation and merging terms
- use drawing and file manipulation and merging commands
- define file and general utility terms
- use file and general utility command

Topics by Week

Wk-1 (Aug. 26 th)	Ch. 1 Intro to AutoCAD
Wk-2 (Sept. 2 nd)	Ch. 2 & Ch. 3 Drawings & Templates, & Introduction to Drawing & Editing
Wk-3 (Sept. 9 th)	Ch. 4 Basic Object Commands
Wk-4 (Sept. 16 th)	Test 1 / Ch. 5 Line Standards & Layers
Wk-5 (Sept. 23 rd)	Ch. 6 & Ch. 7 View Tools & Basic Plotting, Object Snap & AutoTrack
Wk-6 (Sept. 30 th)	Ch. 8 Construction Tools & Multiview Drawings
Wk-7 (Oct. 7 th)	MIDTERM
Wk-8 (Oct. 14 th)	CH. 9 & 10 Text Styles & Multiline Text, & Single Line Text & Multiline Text
Wk-9 (Oct. 21 st)	Ch. 11 Modifying Objects
Wk-10 (Oct. 28 th)	Ch. 12 Arranging & Patterning Objects
Wk-11 (Nov. 4 th)	Test 3 / Ch. 13 Grips, Properties, & Additional Text Tools
Wk-12 (Nov. 11 th)	Ch.14 Polyline & Spline Editing Tools & Ch.15 Obtaining Drawing Information
Wk-13 (Nov. 18 th)	FINAL Project- Due December 2, 2020
Wk-14 (Dec. 2 nd)	FINAL Project- Due December 2, 2020
Wk-15 (Dec. 9 th)	Final Exam

OTHER STUDENT SERVICES INFORMATION

Information about the Library is available at <http://www.brazosport.edu/library> or by calling 979.230.3310.

For assistance with online courses, an open computer lab, online and make-up testing, audio/visual services, and study skills, visit Learning Services next to the Library, call 979.230.3253, or visit <http://www.brazosport.edu/learningservices>.

For drop-in math tutoring, the writing center, supplemental instruction and other tutoring including e-tutoring, visit the Student Success Center, call 979.230.3527, or visit <http://www.brazosport.edu/studentsuccesscenter>.



Get the information you need – when you need it. Click <http://geni.us/BRAZO> to install **BC Connect** on your mobile device to receive reminders, explore careers, map your educational plan, be in the know about events, find out about scholarships, achieve your goals and much more.

To contact the ***Drafting Technology***. Department call **(979-230-3229)**.

Robert Lewis
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979-230-3275
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The Student Services provides assistance in the following:

Counseling and Advising	979.230.3040
Financial Aid	979.230.3294
Student Life	979.230.3355

To reach the Information Technology Department for computer, email, or other technical assistance call the Helpdesk at 979.230.3266.