# Brazosport College Syllabus for DFTG 2319 Intermediate Computer- Aided Drafting

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#### **COURSE DESCRIPTION**

A Continuation of practices and techniques used in basic computer-aided drafting emphasizing advanced dimensioning techniques, the development and use of prototype drawings, construction of pictorial drawings, and customizing of menus.

#### PREREQUISITES

DFTG 1305 or approval by division chair.

### **COURSE OBJECTIVES**

- Apply basic drawing principles to include: setup tools, creating and saving procedures, editing commands, line entity commands,
- Students will apply basic text entry, basic geometry, general utility commands, and the plotting and printing.
- Use intermediate editing commands including inquiry and measure commands as well as advanced drawing and file manipulation and merging commands.
- Demonstrate advanced display and viewing commands using the xref command, and create and extract attributes using various methods.
- o Define cad menu creation and customization commands, terms and skills.
- Define, identify and use 3 dimensional object creation, coordinate commands, and corresponding terms.

#### 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. <u>Reading</u>--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. <u>Responsibility</u>--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- BASIC 2014 Goodheart-Wilcox Publisher Author- Schumaker ISBN:978161904469

**For Online Courses:** Contact the Brazosport College Bookstore with a credit card for course materials. Phone: 979.230.3651. Fax: 979.230.3653. Email:<u>bookstore@brazosport.edu</u>. 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 <u>http://www.brazosport.edu</u>. 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 <u>Zero on</u> <u>assignment, with no option to make up</u>. Sanctions may be imposed beyond your grade in this course by the Dean of Student Services.

## ATTENDANCE AND WITHDRAWAL POLICIES

You 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:

0	DRAWINGS	40%
0	UNIT EXAMS	30%
0	FINAL EXAM	20%
0	PARTICIPATION	10%

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:

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

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

- 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
- 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 AND AXIS MODE COMMANDS
- USE CIRCULAR DIMENSIONING COMMANDS
- USE INTERMEDIATE EDITING COMMANDS
- USE INQUIRY AND MEASURE COMMANDS
- USE MULTILINE AND SPECIAL ENTITY CREATION COMMANDS

# **Topics by Week**

- Wk-1 Dimension Standards and Styles
- Wk-2 Linear and Angular Dimensioning
- Wk-3 Dimensioning Features and Alternate Practices
- Wk-4 Dimensioning with Tolerances
- Wk-5 Editing Dimensions
- Wk-6 Tables

- USE ADVANCED EDITING AND MANIPULATION COMMANDS
- USE TEXT ASSOCIATED COMMANDS
- APPLY PLOTTING AND PRINTING COMMANDS
- USE DRAWING AND FILE MANIPULATION AND MERGING COMMANDS
- USE ADVANCED DISPLAY AND VIEWING COMMANDS
- USE FILE AND GENERAL UTILITY COMMANDS
- DEFINE 3 DIMENSIONAL COORDINATE TERMS
- USE 3 DIMENSIONAL COORDINATE COMMANDS
- IDENTIFY 3 DIMENSIONAL OBJECT CREATION COMMANDS
- USE 3 DIMENSIONAL OBJECT CREATION COMMANDS
- o DEFINE CAD MENU CREATION TERMS
- USE CAD MENU CREATION COMMANDS
- IDENTIFY CAD CUSTOMIZATION TERMS
- APPLY CAD CUSTOMIZATION COMMANDS

- Wk-7 MIDTERM/ Parametric Drafting
- Wk-8 Section Views and Graphic Patterns
- Wk-9 Standard Blocks
- Wk-10 Additional Dynamic Block Tools
- Wk-11 Layout Setup
- Wk-12 Plotting Layouts
- Wk-13 Annotative Objects
- Wk-14 External References
- Wk-15 FINAL

# **OTHER STUDENT SERVICES INFORMATION**

Information about the Library is available at <u>http://www.brazosport.edu/library</u> 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 <u>http://www.brazosport.edu/learningservices</u>.

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 <u>http://www.brazosport.edu/studentsuccesscenter</u>.

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

Robert Lewis Program Coordinator: 979-230-3275 Robert.lewis@brazosport**.edu** D.211A

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.