Midland College Syllabus DFTG 1305 Technical Drafting

Course Description:

A computer-aided modeling course. Development of three-dimensional drawings and models from engineering sketches and orthographic drawings and utilization of three-dimensional models in design work.

Corequisite: DFTG 2340

Text, References, and Supplies: <u>Technical Drafting 101 with AutoCAD</u>,

Douglas Smith, Antonio Ramirez

This class will utilize the required text throughout the entire semester; therefore, having a book is essential.

Software: AutoCAD

NOTE: Students will be advised of the software version and book edition on the first day of class.

The student will need to provide his/her own: Architectural Scale Mechanical Drafting Pencil Soft Eraser

These supplies may be needed in future classes.

Students Learning Outcomes and Core Competencies:

The modern drafting offices use computers to generate and maintain their drawings. These skills require a basic knowledge and understanding of the fundamentals of drafting. Knowledge of basic geometric layout and sketching is an important part of the draftsman skills. Computer skills combined with drafting fundamentals are essential to the modern draftsperson to be successful in today's industry.

The following list of course goals will be addressed in the course. The goals are directly related to the performance objectives. Upon successful completion of the course the student will:

- 1. Create free-hand multi-view sketches.
- 2. Use traditional drafting tools to prepare technical drawings.
- 3. Prepare orthographic/multi-view drawings using miter line construction techniques employing line conventions and line weights that comply with the ASME Y14.3M-1994 standard.
- 4. Set-up, create and print multi-view CAD drawings.

- 5. Dimension multi-view drawings complying with the ASME Y14.5-1994 standard.
- 6. Dimension architectural drawings following accepted practices.
- 7. Create section views using AutoCAD techniques complying with the ASME Y14.3M-1994 standard.
- 8. Prepare isometric drawings with AutoCAD.
- 9. Prepare auxiliary views with AutoCAD employing the ASME Y14.3M-1994 standard.
- 10. Create, insert and edit blocks with AutoCAD.
- 11. Use AutoCAD to prepare working drawings for a mechanical assembly complying with the ASME Y14.34M standard.
- 12. Use AutoCAD to prepare working drawings (floor plan and elevations) for a small residence.
- 13. Use AutoCAD to create 3D models.

Student Contributions, Responsibilities and Class Policies:

- Students are responsible for maintaining, organizing, and backing-up copies of all digital files. Failure to maintain an up-to-date backup may result in data loss.
- Students are expected to exhibit professional and courteous behavior on campus, in the classrooms and labs.
- Cell phones should be silenced while in class.

Attendance Policy

Regular and punctual attendance is expected of all students in all classes for which they have registered. It is the obligation of the student to notify the instructor of all absences as soon as possible and make up all missed work. All absences are considered to be unexcused until a valid reason is provided. It is the responsibility of the instructor to judge the validity of any reasons given for an absence.

Withdrawal Policy

It is the student's responsibility to initiate the withdrawal in the Office of Student Services. Students must complete an official withdrawal form either in person in the Student Services office, online or by written request. Failure to do so may result in the student receiving a grade of "F."

The last day for withdrawal for each registration period is published in the catalog and the current course schedule. Online withdrawal requests must be made on or prior to the dates listed.

Scholastic Dishonesty & Academic Misconduct

Midland College encourages high academic standards, including student responsibility for original work. As a part of this stance, Midland College endorses specific definitions and guidelines regarding scholastic dishonesty and academic misconduct, including the areas of cheating, plagiarism, and collusion.

Definitions and full policy can be found in the Student Rights & Responsibilities section of the online catalog at catalog.midland.edu.

Evaluation of Students:

Assignments	45%
Attendance & Regular Daily Work	35%
Final Project/Exam	

90 and above	\boldsymbol{A}
80-89	B
70-79	C
60-69	D
0-59	F

Course Schedule:

This course meets two or four times a week, for a total of two (2) lecture hours and four (4) lab hours.

Due dates for class assignments will be announced throughout the semester. This will be subject to the progression of the class; therefore, attendance is very important.

AMERICANS WITH DISABILITIES ACT (ADA):

Midland College provides services for students with disabilities through Student Services. In order to receive accommodations, students must visit www.midland.edu/accommodation and complete the Application for Accommodation Services located under the Apply for Accommodations tab. Services or accommodations are not automatic, each student must apply and be approved to receive them. All documentation submitted will be reviewed and a "Notice of Accommodations" letter will be sent to instructors outlining any reasonable accommodations.

NON DISCRIMINATION POLICY:

Midland College does not discriminate on the basis of race, color, national origin, sex, disability or age in its programs and activities. The following individual has been designated to handle inquiries regarding the non-discrimination policies:

Tana Baker

Title IX Coordinator/Compliance Officer 3600 N. Garfield, SSC 131 Midland, Texas 79705 (432) 685-4781 tbaker@midland.edu

For further information on notice of non-discrimination, visit the ED.gov Office of Civil Rights website, or call 1 (800) 421-3481.

Faculty Information:

Department Chair/Professor: Derek Gasch Office: 235 LRC

Phone: O: 432-686-4809 Email: dgasch@midland.edu

Office Hours: TBD

Professor: Vanessa Hyatt Office: 132 ATC

Phone: O: 432-681-6304 Email: <u>vbaker@midland.edu</u>

Office Hours: TBD

Adjunct Instructor: Sean Chaney Office: 193 TC

Phone: O: 432-685-6807 Email: schaney@midland.edu

Office Hours: TBD

Adjunct Instructor: Kevin Starnes Email: <u>kstarnes@midland.edu</u>

Office Hours: TBD

Students are encouraged to contact the instructor at any time; however, making an appointment will guarantee the instructor's availability at a specific time.

Division Information: Applied Technology

Division Dean: Curt Pervier TC 143 Phone# 432-685-4676 Division Secretary: Lisa Hays TC 143 Phone# 432-685-4676