



College of the Mainland

DFTG 1433 201HY
Mechanical Drafting
Fall 2021
Monday 6:00-8:50pm Lab
A minimum of 3 hours online

Instructor Information:

Name: Andrew Gregory
Email: Agregory2@com.edu
Office: STEM-134
Phone: 409 933-8161

Student hours and location:

My office hours are Monday, Tuesday, Wednesday, Thursday 3:00 to 5:00 pm. I am typically in the lab, STEM-134.

Required Textbook:

AutoCAD and Its Applications Basics 2020, 26th Edition,
Terence M. Shumaker and David A. Madsen and David P. Madsen.
Format: Hardcover or Online, Copyright: © 2019

Course Description:

Study of mechanical drawings using dimensioning and tolerances, sectioning techniques, orthographic projection, and pictorial drawings.

Course requirements:

Each week there is the same process for learning the material:

1. First you read the text, watch the screencasts of me demonstrating the content of the chapter, and complete five exercises.
2. In the lab we will collectively review any question the class members have on the exercises.
3. In lab we will collectively complete the drawing problems.
4. You will also take a short quiz in Blackboard to keep you reading the text and completing the exercises.

Determination of Course Grade/Detailed Grading Formula

Students will be graded on "points-earned" criteria. A grade of C or above is considered acceptable.

Assessments	Points Each	Total Point Value
Lab Attendance per chapter	10	160
Exercises (per chapter)	20	340
Drawing Problems (per chapter)	50	800
Chapter Quizzes	20	320
Online Discussion	50	50
Course Evaluation	50	50
TOTAL		1,700

*Individual Assignments due dates and criteria are listed on the schedule

Grading Scale

1620-1800 points = A

1440-1619 points = B

1260-1439 points = C

1080-1259 point = D

Below 1080 = F

Make-Up Policy:

Late work will incur a 20% penalty. If there is a documented medical or family emergency, please see me to discuss a work plan to get you caught up.

Attendance Policy:

Attendance is required at the lab sessions. In addition, you are required to log in to 'Blackboard' a minimum of once per week.

Communicating with your instructor: ALL electronic communication with the instructor must be through your COM email. Due to FERPA restrictions, faculty cannot share any information about performance in the class through other electronic means. . I do receive my college email on my phone. Typically, emails are answered within a day or less. Course assignments will be graded within a week. I would like to have all the previous week assignments graded by Lab Time.

Student Learner Outcomes:

Upon successful completion of this course, students will:

1. Develop a set of working drawings including assembly
2. Develop a set of working drawing including, detail.
3. Develop a set of working drawings including pictorial

General Education Core Objectives:

Students successfully completing this course will demonstrate competency in the following Core Objectives:

1. **Critical Thinking Skills:** Students will demonstrate creative thinking, innovation, and the ability to analyze, evaluate, and synthesize information.
2. **Communication Skills:** Develop, interpret, and express ideas through written, oral, and visual communication.
3. **Empirical and Quantitative Skills:** Students will demonstrate applications of scientific and mathematical concepts.
4. **Teamwork:** Students will have the ability to consider different points of view and to work effectively with others to support a shared purpose or goal.
5. **Social Responsibility:** Students will demonstrate intercultural competence, knowledge of civic responsibility, and the ability to engage effectively in regional, national, and global communities.
6. **Personal Responsibility:** Evaluate choices and actions of others or one's own, and relate consequences to ethical decision-making.

Outcome	Maps to Core Objective	Assessed via this Assignment
1. Develop a set of working drawings including assembly	Empirical and Quantitative	Chapter 2 Drawing Problems
2. Develop a set of working drawing including, detail.	Critical Thinking	Chapter 4 Drawing Problems
3. Develop a set of working drawings including pictorial	Communication-Visual	Chapter 6 Drawing Problems

Academic Dishonesty:

Any incident of academic dishonesty will be dealt with in accordance with college policy and the Student Handbook. Academic dishonesty – such as cheating on exams is an extremely serious offense and will result in a grade of zero on that exam and the student will be referred to the Office of Student Conduct for the appropriate disciplinary action.

Student Concerns:

If you have any questions or concerns about any aspect of this course, please contact me using the contact information previously provided. If, after discussing your concern with me, you continue to have questions, please contact Professor Sheena Abernathy, Chair Business Computer Technology Department at sabernathy@com.edu or 933-8330.

Course outline:

Wk	Lab Date	Chapter	Assignments, Quizzes, Tests	Points	Due Date	Time	SLO
1	8/23	1 Introduction to AutoCAD	Lab Attendance	10	8/23		
			Exercise 1-1	10	8/24	10pm	
			Exercise 1-2	10	8/24	10pm	
			Chapter 1 Problems	50	8/24	10pm	
			Chapter 1 Quiz	20	8/24	10pm	
1	8/30	2 Drawings and Templates	Lab Attendance	10	8/30		
			Exercise 2-1	3	8/29	10pm	
			Exercise 2-2	3	8/29	10pm	
			Exercise 2-3	4	8/29	10pm	
			Exercise 2-4	4	8/29	10pm	
			Exercise 2-5	4	8/29	10pm	
			Chapter 2 Problems	50	8/31	10pm	1
			Chapter 2 Quiz	20	8/31	10pm	
3	9/13	3 Introduction to Drawing and Editing	Lab Attendance	10	9/13		
			Exercise 3-1	4	9/12	10pm	
			Exercise 3-3	4	9/12	10pm	
			Exercise 3-4	4	9/12	10pm	
			Exercise 3-5	4	9/12	10pm	
			Exercise 3-14	4	9/12	10pm	
			Chapter 3 Problems	50	9/12	10pm	
			Chapter 3 Quiz	20	9/12	10pm	
4	9/20	4 Basic Object Commands	Lab Attendance	10	9/20		
			Exercise 4-1	4	9/19	10pm	
			Exercise 4-3	4	9/19	10pm	
			Exercise 4-5	4	9/19	10pm	
			Exercise 4-6	4	9/19	10pm	
			Exercise 4-10	4	9/19	10pm	
			Chapter 4 Problems	50	9/21	10pm	2
			Chapter 4 Quiz	20	9/21	10pm	
5	9/27	5 Lines Standards and Layers	Lab Attendance	10	9/27		
			Exercise 5-1	4	9/26	10pm	
			Exercise 5-3	4	9/26	10pm	
			Exercise 5-4	4	9/26	10pm	
			Exercise 5-6	4	9/26	10pm	
			Exercise 5-7	4	9/26	10pm	
			Chapter 5 Problems	50	9/28	10pm	
			Chapter 5 Quiz	20	9/28	10pm	

Wk	Lab Date	Chapter	Assignments, Quizzes, Tests	Points	Due Date	Time	SLO
6	10/4	6 View Tools	Lab Attendance	10	10/4		
		and Basic Plotting	Exercise 6-4	4	10/3	10pm	
			Exercise 6-5	4	10/3	10pm	
			Exercise 6-6	4	10/3	10pm	
			Exercise 6-7	4	10/3	10pm	
			Exercise 6-8	4	10/3	10pm	
			Chapter 6 Problems	50	10/5	10pm	3
			Chapter 6 Quiz	20	10/5	10pm	
7	10/11	7 Object Snap	Lab Attendance	10	10/11		
		and AutoTrack	Exercise 7-1	4	10/10	10pm	
			Exercise 7-2	4	10/10	10pm	
			Exercise 7-5	4	10/10	10pm	
			Exercise 7-7	4	10/10	10pm	
			Exercise 7-12	4	10/10	10pm	
			Chapter 7 Problems	50	10/12	10pm	
			Chapter 7 Quiz	20	10/12	10pm	
8	10/18	8 Construction Tools	Lab Attendance	10	10/18		
		and Multiview Drawings	Exercise 8-1	4	10/19	10pm	
			Exercise 8-3	4	10/19	10pm	
			Exercise 8-4	4	10/19	10pm	
			Exercise 8-5	4	10/19	10pm	
			Exercise 8-6	4	10/19	10pm	
			Chapter 8 Problems	50	10/20	10pm	
			Chapter 8 Quiz	20	10/20	10pm	
9	10/25	9 Text Styles and Multiview	Lab Attendance	10	10/25		
		Text	Exercise 9-1	4	10/24	10pm	
			Exercise 9-2	4	10/24	10pm	
			Exercise 9-4	4	10/24	10pm	
			Exercise 9-5	4	10/24	10pm	
			Exercise 9-6	4	10/24	10pm	
			Chapter 9 Problems	50	10/26	10pm	
			Chapter 9 Quiz	20	10/26	10pm	
10	11/1	10 Single-Line Text	Lab Attendance	10	11/1		
		and Additional Text Tools	Exercise 10-1	4	10/31	10pm	
			Exercise 10-2	4	10/31	10pm	
			Exercise 10-3	4	10/31	10pm	
			Exercise 10-4	4	10/31	10pm	
			Exercise 10-5	4	10/31	10pm	

Wk	Lab Date	Chapter	Assignments, Quizzes, Tests	Points	Due Date	Time	SLO
			Chapter 10 Problems	50	11/2	10pm	
			Chapter 10 Quiz	20	11/2	10pm	
11	11/8	11 Modifying Objects	Lab Attendance	10	11/8		
			Exercise 11-2	4	11/7	10pm	
			Exercise 11-4	4	11/7	10pm	
			Exercise 11-6	4	11/7	10pm	
			Exercise 11-8	4	11/7	10pm	
			Exercise 11-10	4	11/7	10pm	
			Chapter 11 Problems	50	11/9	10pm	
			Chapter 11 Quiz	20	11/9	10pm	
12	11/15	12 Arranging	Lab Attendance	10	11/15		
		and Patterning Objects	Exercise 12-1	4	11/14	10pm	
			Exercise 12-2	4	11/14	10pm	
			Exercise 12-5	4	11/14	10pm	
			Exercise 12-6	4	11/14	10pm	
			Exercise 12-8	4	11/14	10pm	
			Chapter 12 Problems	50	11/16	10pm	3
			Chapter 12 Quiz	20	11/16	10pm	3
13	11/22	13 Grips, Properties, and	Lab Attendance	10	11/22		
		Selection Techniques	Exercise 13-2	4	11/21	10pm	
			Exercise 13-4	4	11/21	10pm	
			Exercise 13-6	4	11/21	10pm	
			Exercise 13-9	4	11/21	10pm	
			Exercise 13-11	4	11/21	10pm	
			Chapter 13 Problems	50	11/23	10pm	
			Chapter 13 Quiz	20	11/23	10pm	
		Course Evaluation		50	12/5	11pm	
13	11/22	14 Polyline and Spline	Lab Attendance	10	11/22		
		Editing Tools	Exercise 14-1	4	11/21	10pm	
			Exercise 14-2	4	11/21	10pm	
			Exercise 14-4	4	11/21	10pm	
			Exercise 14-5	4	11/21	10pm	
			Exercise 14-6	4	11/21	10pm	
			Chapter 14 Problems	50	11/23	10pm	
			Chapter 14 Quiz	20	11/23	10pm	
14	11/29	15 Obtaining Drawing Information	Lab Attendance	10	11/29		

Wk	Lab Date	Chapter	Assignments, Quizzes, Tests	Points	Due Date	Time	SLO
			Exercise 15-1	4	11/28	10pm	
			Exercise 15-3	4	11/28	10pm	
			Exercise 15-5	4	11/28	10pm	
			Exercise 15-6	4	11/28	10pm	
			Exercise 15-7	4	11/28	10pm	
			Chapter 15 Problems	50	11/30	10pm	
			Chapter 15 Quiz	20	11/30	10pm	
15	11/29	16 Dimension Standards	Lab Attendance	10	11/29		
		and Styles	Exercise 16-1	4	11/28	10pm	
			Exercise 16-2	4	11/28	10pm	
			Exercise 16-3	4	11/28	10pm	
			Exercise 16-4	4	11/28	10pm	
			Exercise 16-5	4	11/28	10pm	
			Chapter 16 Problems	50	11/30	10pm	
			Chapter 16 Quiz	20	11/30	10pm	
16	12/6	17 Linear and Angular Dimensions	Lab Attendance	10	12/6		
			Exercise 17-1	4	12/5	10pm	
			Exercise 17-4	4	12/5	10pm	
			Exercise 17-5	4	12/5	10pm	
			Exercise 17-7	4	12/5	10pm	
			Exercise 17-8	4	12/5	10pm	
			Chapter 17 Problems	50	12/7	10pm	
			Chapter 17 Quiz	20	12/7	10pm	
		Discussion Forum	Discussion of Personal Responsibility	50	12/7	10pm	
			Total	1700			

Instructional Policies and Guidelines

Grade Appeal Process:

Concerns about the accuracy of grades should first be discussed with the instructor. A request for a change of grade is a formal request and must be made within six months of the grade assignment. Directions for filing an appeal can be found in the student handbook. https://build.com.edu/uploads/sitecontent/files/student-services/Student_Handbook_2019-2020v5.pdf

An appeal will not be considered because of general dissatisfaction with a grade, penalty, or outcome of a course. Disagreement with the instructor's professional judgment of the quality of the student's work and performance is also not an admissible basis for a grade appeal. https://build.com.edu/uploads/sitecontent/files/student-services/Student_Handbook_2019-2020v5.pdf

Academic Success & Support Services:

College of the Mainland is committed to providing students the necessary support and tools for success in their college career. Support is offered through our Tutoring Services, Library, Counseling, and through Student Services. Please discuss any concerns with your faculty or an advisor.

ADA Statement:

Any student with a documented disability needing academic accommodations is requested to contact Holly Bankston at 409-933-8520 or hbankston@com.edu. The Office of Services for Students with Disabilities is located in the Student Success Center.

Counseling Statement:

Any student that is needing counseling services is requested to please contact Holly Bankston in the student success center at 409-933-8520 or hbankston@com.edu. Counseling services are available on campus in the student center for free and students can also email counseling@com.edu to setup their appointment. Appointments are strongly encouraged; however, some concerns may be addressed on a walk-in basis.

Textbook Purchasing Statement:

A student attending College of the Mainland is not under any obligation to purchase a textbook from the college-affiliated bookstore. The same textbook may also be available from an independent retailer, including an online retailer.

Withdrawal Policy:

Students may withdraw from this course for any reason prior to the last eligible day for a “W” grade. Before withdrawing students should speak with the instructor and consult an advisor. Students are only permitted to withdraw six times during their college career by State law. The last day to withdraw for the 1st 8 week session is October 6th, November 19th for 16 week courses and December 2nd for the 2nd 8 week session

**It is the responsibility of the student to withdraw from the course officially by contacting Admissions and completing the necessary processes.

FN Grading:

The FN grade is issued in cases of failure due to a lack of attendance, as determined by the instructor. The FN grade may be issued for cases in which the student ceases or fails to attend class, submit assignments, or participate in required capacities, and for which the student has failed to withdraw. The issuing of the FN grade is at the discretion of the instructor.

Early Alert Program:

The Counseling Center at College of the Mainland has implemented an Early Alert Program. I have been asked to refer students to the program throughout the semester if they have difficulty completing assignments or have poor attendance. If you are referred to the Early Alert Program you will be contacted by someone in the Counseling Department. As student success and retention is very important to us, someone from the

Counseling Department will schedule a meeting with you to see what assistance they can offer in order for you to meet your academic goals

COVID-19 Statement:

All students, faculty, and staff are expected to familiarize themselves with materials and information contained on the College of the Mainland's Coronavirus Information site at www.com.edu/coronavirus. In compliance with Governor Abbott's May 18 Executive Order, face coverings/masks will no longer be required on COM campus. Protocols and college signage are being updated. We will no longer enforce any COM protocol that requires face coverings. We continue to encourage all members of the COM community to distance when possible, use hygiene measures, and get vaccinated to protect against COVID-19. Please visit com.edu/coronavirus for future updates.

Success Tips for Students, Course Delivery & Expectations:

Course Delivery & Expectations

The course content is delivered via the online portion of the course through read, watching demonstrations on a screencast and you completing practice exercises and chapter problems. A short five question quiz is also given on each chapter. This is to ensure that you read the text.

You will need to log in each week and the reading, watching the demos and completing the exercise and problems will probably take between 4 and 8 hours outside of the lab time.

The lab is intended to address your questions on the current chapter not present in its entirety. Therefore, you should have completed the reading, watched the screencasts and completed all the exercises before the weekly Lab. The exercises are due at 10:00pm the night before our weekly lab meeting

The drawing problems and quiz are due by the day following our Lab Meeting at 10:00pm

All exercises and drawing problems should be attached to the course assignment in the online course. The files should be in their native format, meaning, if it is a word document submit the word document or if it is an AutoCAD drawing submit the AutoCAD file.

Course Prerequisite:

None **Note: that this course is a prerequisite for other drafting courses and a grade of 'C' or better is required in this course to satisfy the prerequisite requirement.**

Technology Prerequisite:

You must complete the free [Online Learners workshop](#).

Course Format:

The structure of this hybrid course is called either a 'Flipped' or 'Inverted' classroom. What that means to you, as the student, is that the traditional lecture component of a

Lecture/Lab course is delivered online. You can be at home on the couch or can watch and draw on your schedule. The online part is demonstration screencasts of how to use the AutoCAD software. The Lab part is where we meet together one evening a week for some quality face time. Both the online and Lab parts of the class are essential. You should have watched all of the screencasts, completed the exercises, and attempted the drawing problems prior to our Lab session. At the Lab session, we will open with a discussion of issues or problems the group encountered, provide more face-to-face demonstrations, and review your work one on one at your computer.

Technology Outage Policy:

It is your responsibility to complete the coursework in a timely manner. THE ONLY EXTENSION OF DUE DATES related to technology outage is an outage of College of the Mainland's systems such as Blackboard or the internet connect to the College. If your computer or internet provider is experiencing a technological outage, other options include completing the work at the College or at another location, which has WIFI.

Required Materials:

Flash Drive – 4 MB