# IT 111.01E, .02E, .03E, .04E Computer - Aided Design (CAD)
# Course Syllabus: Fall 2015
# Web Enhanced

**Instructor:** Perry Moler, Instructor
Department of Engineering & Technology

**Office Location:** Charles J. Austin Engineering & Technology Building, Room 219
**Office Hours:** M,R 9:00-10:00 a.m.; W 8:00-9:00 a.m.; F 9:00-11:00 a.m. or by appointment.

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## COURSE INFORMATION

### Materials – Textbooks, Readings, Supplementary Readings:

*Textbook(s) Required*: **Tutorial Guide to AutoCAD 2014,**
Shawna Lockhart
ISBN 978-1-58503-790-2

**Course Description:** IT 111 - Computer-Aided Design (CAD) - (ENGR 1304) Computer Aided Design (CAD). Three semester hours (2 lecture, 2 lab) This is an introductory course in computer-aided drafting/ design. Students will be taught basic CAD commands, tools, multi-view drawing and dimensioning techniques. For successful completion of this course a comprehensive project demonstrating the use and execution of CAD will be required. 3.000 Credit Hours, 3.000 Lecture hours

### Student Learning Outcomes:

1. Demonstrate basic concepts of the AutoCAD software
2. Apply basic concepts to develop construction (drawing) techniques
3. Ability to manipulate drawings through editing and plotting techniques
4. Understand geometric construction
5. Produce template drawings
6. Produce 2D Orthographic Projections
7. Understand and demonstrate dimensioning concepts and techniques
8. Understand Section and Auxiliary Views
9. Become familiar with the use of Blocks, Design Center, and Tool Palettes
10. Become familiar with Solid Modeling concepts and techniques.

## COURSE REQUIREMENTS

### Instructional / Methods / Activities Assessments

Each student will be required to turn in 8 assignments, 4 quizzes, mid-term and final exam. The assignments will coincide with the tutorials covered in the text. Further details will be in given with each of the assignment.

### Grading

| | |
|---|---|
| Assignments | 250 pts. |
| Quizzes | 40 pts. |
| Mid-Term Exam | 30 pts. |
| Attendance/Participation | 5 pts. |
| Final Exam | 75 pts. |
| **Total points possible for semester** | **400 pts.** |

359.5 ~ 400 points A
319.5 ~ 359.4 points B
279.5 ~ 319.4 points C
240 ~ 279.4 points D
< 240 points F

**LATE WORK**: Late work **WILL NOT** be accepted.

## TECHNOLOGY REQUIREMENTS

The following technologies will be required for this course. Internet access / connection – high speed recommended (not dial-up) Basic ability to use a personal computer required to learn the use of the AutoCAD program.

## ACCESS AND NAVIGATION

Access to the internet and software applications will be required to complete and submit assignments, communicate with professor, and access grading. These applications are available in the Department of Engineering & Technology's computer labs if the student does not have access from home.

## COMMUNICATION AND SUPPORT

### Interaction with Instructor Statement:

The instructor will be available during class, office hours and through the university email address perry.moler@tamuc.edu "Please note student's emails will be answered within 48 hours" Any email sent from the instructor will be sent to the student's myleo address.

## COURSE AND UNIVERSITY PROCEDURES/POLICIES

**Course Specific Procedures:**

Texas A&M University-Commerce will not condone plagiarism in any form. Plagiarism represents disregard for academic standards and is strictly against University policy. Plagiarized work can result in a "0" on a given assignment(s) or an "F" for the course as well as further administrative sanctions permitted under University policy. You may discuss course work and other course materials with fellow students (except during tests), but it is inappropriate to have another student do your course work or provide you with any portion of it.

Guidelines for properly quoting someone else's writings and the proper citing of sources can be found in the APA Publication Manual. If you do not understand the term "plagiarism", or if you have difficulty summarizing or documenting sources, contact your professor for assistance.

**University Specific Procedures:**

*ADA Statement*

**Students with Disabilities:**

The Americans with Disabilities Act (ADA) is a federal anti-discrimination statute that provides comprehensive civil rights protection for persons with disabilities. Among other things, this legislation requires that all students with disabilities be guaranteed a learning environment that provides for reasonable accommodation of their disabilities. If you have a disability requiring an accommodation, please contact:

**Office of Student Disability Resources and Services**
**Texas A&M University-Commerce**
**Gee Library**
**Room 132**
**Phone (903) 886-5150 or (903) 886-5835**
**Fax (903) 468-8148**
StudentDisabilityServices@tamuc.edu

*Student Conduct*

All students enrolled at the University shall follow the tenets of common decency and acceptable behavior conducive to a positive learning environment. (See *Code of Student Conduct from Student Guide Handbook).*

***Non-Discrimination Statement***

A&M-Commerce will comply in the classroom, and in online courses, with all federal and state laws prohibiting discrimination and related retaliation on the basis of race, color, religion, sex, national origin, disability, age, genetic information or veteran status. Further, an environment free from discrimination on the basis of sexual orientation, gender identity, or gender expression will be maintained.

## COURSE OUTLINE / CALENDAR

| DATE | TOPIC/ ASSIGNMENT |
|---|---|
| **Week 1** | First official day of class. Review objectives, syllabus, etc. Become familiar with MyLeo and e-College, group project.<br>Assign reading over Chapter 1 and 2, Quiz Week 2. |
| **Week 2** | *LECTURE*<br>Group Projects, Lecture on basic concepts of AutoCAD tools. (AutoCAD Ribbons / AutoCAD set-up,)<br>*LAB*<br>Quiz over Chapters 1 and 2<br>Assignment 1A-Handout due by the end of class. |
| **Week 3** | *LECTURE*<br>Lecture on basic concepts of AutoCAD tools. (Drawing Commands, Modifying Commands)<br>*LAB*<br>Assignment 1B- Due Before the Start of Class (Week 4).<br>Assign reading over Chapter 3, Quiz Week 4. |
| **Week 4** | *LECTURE*<br>Lecture on basic concepts of AutoCAD tools.(Drawing Commands, Modifying Commands)<br>*LAB*<br>Quiz over Chapter 3<br>Assignment 2A-Due Before the Start of Class (Week 5). |
| **Week 5** | *LECTURE*<br>Lecture on basic concepts of AutoCAD tools. (Dimension Commands / Title Blocks)<br>*LAB*<br>Assignment 2B- Due Before the Start of Class (Week 6).<br>Assign reading over Chapters 5 and 7, Quiz Week 6 |
| **Week 6** | *LECTURE*<br>Lecture on basic concepts of AutoCAD tools. (Commands Review)<br>*LAB*<br>Quiz over Chapters 5 and 7<br>Assignment 3A- Due Before the Start of Class (Week 7). |
| **Week 7** | *LECTURE*<br>None<br>*LAB*<br>Assignment 3B- Due Before the Start of Class (Week 8).<br>Assign reading over Chapter 6, Quiz Week 9 |
| **Week 8** | Mid-Term Exam |
| **Week 9** | *LECTURE*<br>Lecture intermediate concepts & techniques of AutoCAD tools. (Orthographic)<br>*LAB*<br>Quiz over Chapter 6<br>Assignment 4A-Drawing handout due by the end of class on Week 10 |
| **Week 10** | *LECTURE*<br>Lecture intermediate concepts & techniques of AutoCAD tools. (Orthographic)<br>*LAB*<br>Assignment 4A-Drawing handout due end of class on Week 10 |
| **Week 11** | *LECTURE*<br>Lecture Revit<br>*LAB*<br>Assignment 5A-Revit Project due by the end of class Week 14 |

| DATE | TOPIC/ ASSIGNMENT |
|---|---|
| **Week 12** | LAB<br>Assignment 5A-Revit Project due by the end of class Week 14 |
| **Week 13** | THANKSGIVING BREAK |
| **Week 14** | *LAB*<br>Assignment 5A-Revit Project due by the end of class Week 14 |
| **Week 15** | Review for Final Exam |
| **Week 16** | **Final Exam** |