VALENCIA

BEGINNING CAD

CADT 150.501 | SPRING 2020 | 3 CREDITS

Monday-Wednesday 9:00 am to 10:15 am

Instructor: Thomas (Tom) Vliet
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Office: *Academic Affairs Office, Adjunct Cubicle 13*
                [office hours by appointment]

SYLLABUS

Course Description:

The purpose of the course is to introduce students to computer–assisted design. The course consists of lectures and lab assignments using the current version of AutoCAD. Students will also gain experience using Internet CAD resources. You should schedule at least two hours per week (outside of class time) in the lab to complete assignments.

Course Objectives:

1. Introduce students to computer-aided design software.
2. Learn how to create drawings and 3D models using design software.
3. Learn efficient, organized approaches to problem solving using a CAD system.

Required Text and Materials:

1. *AutoCAD 2020 for Beginners*   *by CADFolks*
           ISBN **13-978-1098820978**
2. *Storage media for your files (USB Flash Drive – Min 16 GB).*
3. *Notebook for class notes.*

Attendance:

Attendance is necessary for you to fully understand the material presented. Attendance will be taken at the beginning of each class, and students need to be in the class ready to work. "Students are required to attend all meetings of their classes unless excused by the instructor." (UNM Valencia Catalog)

Tardiness:

Repeated Tardiness is discouraged, and the Instructor will remind students that it is extremely important to come to class prepared and ready to work in order to fulfill the requirements of the course. Excessive Tardiness will be reflected on your final grade. A student with excessive absences and/or Tardiness may be dropped from a course with a grade of W by an instructor.

Make-Up Work:

"Absences due to illness, field trips, athletic trips, and so forth do not relieve the student of the responsibility for missing assignments. It is the obligation of the student to take the initiative in arranging with the instructor to make up missed work." (UNM Valencia Catalog) Students can Make-up missed assignments but need to discuss this arrangement with the Instructor.

Computer Lab Responsibility:

Please be advised that use of computer labs on UNM properties is governed by "Policy 2500: Acceptable Computer Use" which can be found at http://policy.unm.edu/university-policies/2000/2500.html.   Food and drink are also prohibited in any computer lab on campus. Anyone violating these policies is subject to possible suspension and loss of computer lab privileges.

Evaluation:

Students are graded based on tests and drawing assignments:

- *Drawing Assignments*   *80%*
- *Final Exam; Complete Floor Plan*   *20%*

Letter grades   100% or higher = A+
                                    91%-99%   = A
                                    81%-90%   = B
                                    71%-80%   = C
                                    61%-70%   = D
                                    Below 60%   = F

Course Schedule:

AutoCAD 2020 for Beginners *by CADFolks*

Week 1: Chapter 1; "Introduction to AutoCAD 2020" – Wednesday, January 22nd.

- AutoCAD User Interface
- Terminology and Command List

Week 2: Chapter 2; "Drawing Basics" – Monday and Wednesday

- Exploring Essential Drawing Tools
- Create simple drawings using the Tools

Week 3: Chapter 3; "Drawing Aids" – Monday and Wednesday

- Defining Drawing Settings that will assist you in creating a drawing
- Using Layers

Week 4: Chapter 4; "Editing Tools" – Monday and Wednesday

- Learning tools to modify existing objects or use existing objects to create new or similar objects

Week 5: Chapter 5; "Multi View Drawings" – Monday and Wednesday

- Orthographic Views (Orthographic Projection)

Week 6: Chapter 6; "Dimensions and Annotations" – Monday and Wednesday

- Creating a Dimension Style
- Adding Leaders – Annotations

Week 7: Chapter 7; "Parametric Tools" – Monday and Wednesday

- Dimensional Constraints
- Parameter Manager

Week 8: Chapter 8; "Section Views" – Monday and Wednesday

- Create Section Views
- Hatch Tool

Mid-Term Break (March 16th to March 20th)

Week 9: Chapter 9; "Blocks, Attributes, and Xrefs" – Monday and Wednesday

- Create and Insert Blocks
- Define and Insert Attributes
- Work with Xrefs

Week 10: Chapter 10; "Layouts and Annotative Objects" – Monday and Wednesday

- Create Layouts and Viewports
- Create Title Block and Annotative Objects

Week 11: Chapter 11; "Templates and Plotting" – Monday and Wednesday

- Create Plot Styles and Templates
- Plot/Print the Drawing

Week 12: Chapter 12; "3D Modeling Basics" – Monday and Wednesday

- Introduction to commands for 3D Modeling

Week 13: Chapter 13; "Solid Editing & Generating 2D Views" – Monday and Wednesday

- Introduction to Editing 3D Models

Week 14: Chapter 14; "Creating Architectural Drawings" – Monday and Wednesday

- In this Chapter, you will learn to create an architectural drawing

Week 15: Final Exam; Complete Floor Plan – Monday and Wednesday

- Two days to complete Floor Plan

Week 16: Finals Week (May 11th to May 15th)

- **Students may continue to work on their Floor Plan in class, but it must be completed by end of class, Wednesday of Finals Week.**

Academic Integrity:

Having academic integrity is paramount to your success in any class. Plagiarism or cheating is not tolerated. Any instance of this will result in a grade of zero for that assignment. Here is the link to the UNM Academic Dishonesty Policy: https://policy.unm.edu/regents-policies/section-4/4-8.html. The policy states: Each student is expected to maintain the highest standards of honesty and integrity in academic and professional matters. The University reserves the right to take disciplinary action, up to and including dismissal, against any student who is found guilty of academic dishonesty or who otherwise fails to meet the expected standards. Any student judged to have engaged in academic dishonesty in course work may receive a reduced or failing grade for the work in question and/or for the course.

Academic Dishonesty is defined as: "Academic dishonesty" includes, but is not limited to, dishonesty in quizzes, tests, or assignments; claiming credit for work not done or done by others; hindering the academic work of other students; misrepresenting academic or professional qualifications within or without the University; and nondisclosure or misrepresentation in filling out applications or other University records.

Equal Access Disabilities:

Students with disabilities should notify the instructor of special needs at the beginning of the semester

If you have a documented disability, the Equal Access Services office will provide the instructor with a letter outlining your accommodations. I will then discuss the accommodations with you to determine the best learning environment. If you feel that you need accommodations, but have not documented your disability, please contact Jeanne Lujan, the coordinator for Equal Access Services at 925-8910 or jmlujan@unm.edu.

Equal Opportunity and Non-Discrimination:

In an effort to meet obligations under Title IX, UNM faculty, Teaching Assistants, and Graduate Assistants are considered "responsible employees" by the Department of Education (see page 15 - http://www2.ed.gov/about/offices/list/ocr/docs/qa-201404-title-ix.pdf). This designation requires that any report of gender discrimination which includes sexual harassment, sexual misconduct and sexual violence made to a faculty member, TA, or GA must be reported to the Title IX Coordinator at the Office of Equal Opportunity (oeo.unm.edu). For more information on the campus policy regarding sexual misconduct, see: https://policy.unm.edu/university-policies/2000/2740.html.

End of Syllabus