

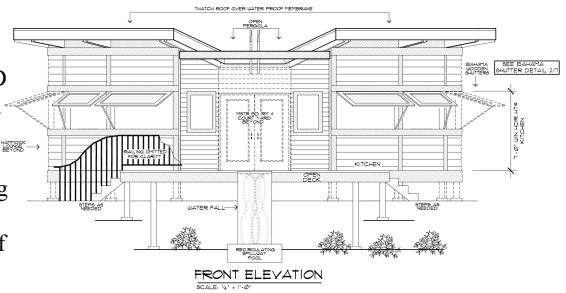


CAD III

Glen Ridge High School

Objectives

It shall be the purpose of this course to provide students with an exposure to CAD software. Each unit will provide the student with a basic learning experience in a specific drafting area, then provide an in-depth experience at the same type of drafting with projects that must be completed on the computer. This experience will allow the student to be creative and explore new techniques while reinforcing CAD skills. Students will learn by repetition and constant evaluation of their work. All drawings will be evaluated in hard copy form and a complete record of the year's work will be placed in a portfolio.



Topics That Will Be Covered

1. Review of CAD
 - a. Sketching
 - b. Ruler Measurements (English/Metric)
 - d. Single View Drawings
 - h. Dimensioning Drawings
2. Design Fundamentals
 - a. Orthographic Drawings
 - b. Oblique Drawings
 - c. Isometric Drawings
 - d. One Point Perspective
 - e. Two Point Perspective
 - f. Sections Full and Half
 - g. Auxiliary Drawings
3. Machine Unit
 - a. Assembly Drawings
 - b. Exploded View Drawings
 - d. Threads and Fasteners
 - e. Solid Modeling and Rendering
4. Architectural Unit
 - a. Sketching
 - b. Residential Plans
 - c. Floor Plans
 - d. Elevation Views
 - e. Renderings
 - f. Landscape Plans
 - g. Interior Perspectives
 - H. Window and Door Details
 - I. Kitchen Layout and Design
 - J. Apartments and Condominiums
 - k. Commercial Buildings
 - I. Restaurants

Projects

1. REVERSE ENGINEERING
2. INVENTION OR MODIFICATION
3. 3D ASSEMBLY MODELING
4. ARCHITECTURE DESIGN
5. ALTERNATIVE ENERGY

Students are required to work efficiently on each project during the marking period. Points will be docked if projects are not completed by the assigned due date.

Quizzes

Students will be quizzed on information presented in class. Safety quizzes will be taken for each tool or machine students operate. Students are encouraged to take notes.

Notebook

Each student is required to keep a notebook including all notes, handouts and assignments given in class. At the end of each marking period notebooks will be graded.

Grading

Drawings & Projects 70%
 Quizzes & Notebooks 20%
 Class Participation 10%

Class Participation

Each student will receive a class participation grade based on his or her level of participation during the marking period.