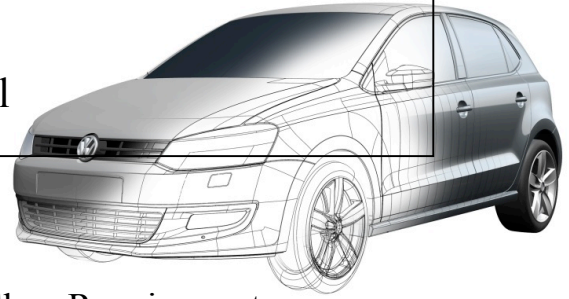




# CAD II

Glen Ridge High School



VirtualCar

## Objectives

Computer Aided Drafting provides students with opportunities to discover the basic concepts of drafting. By the close of the year each student will be efficient in the use of AutoCAD. Also, an understanding of the manufacturing process is essential for any draftsmen. Therefore, practical (real life) situations will be applied to the topics below. Inventor will be used for 3D applications. Revit will be used for architecture. Students who wish to proceed further will enroll in CAD III where they will broaden their knowledge of CAD.

## Class Requirements & Grading

### 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. Commercial Buildings
  - J. Window and Door Schedules

### Projects

1. DRAW IT!
2. INVENTION OR MODIFICATION
3. 3D ASSEMBLY MODELING
4. ARCHITECTURE DESIGN
5. ARCHITECTURE RENDERING

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 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.