Welcome to Advanced CAD! The first part of this class will be spent reviewing some of the basic AutoCad Skills you learned in Basic Cad. We will then move on to more advanced concepts such as solid geometry. This class will also promote team work and design skills through group problem solving activities. Advanced Cad will touch on mechanical as well as architectural drawings.

Text: 1. <u>AutoCAD 2000: A Problem-Solving Approach</u>, Sham Tickoo

- 2. Architectural AutoCad:Design/Drafting/Presenation, Madsen, Palma
  - 3. Learning Mechanical Desktop, Short Thomas

## **Course Topics:**

Weeks 1-3: Review of basic AutoCad commands

Weeks 4-6: Review of basic drawing types

Weeks 7-10: Group Floor Plan Activity

Weeks11-20: Introduction of Inventor and basic drawings

Weeks 21-30: House Plan Design and other Group Activities

Weeks 31-40: Term Project

# Saving a Drawing:

Every Drawing must be saved under the following format "LastNameDrawing#Per"

Example: If I completed Drawing number 4 in Third Period I would save it as follows HowardDrawing#4Per3

### Assignments:

Reading assignments will be given periodically to supplement and reinforce the information presented in class. Quizzes may accompany these assignments to reinforce ideas.

# **Class Activities:**

- 1. Most activities for this class will be drawings.
- 2. Some time will be spent organizing your portfolio

#### **Title Block Creation:**

Each student will create a unique title block, both A and B sizes, which will be used on most of their drawings for the course. This will be created using criteria that will be given to each student.

### **Term Project:**

Each student will have to choose a very detailed drawing or several smaller ones to be completed as a term Project. The term project will be graded with a rubric which will be provided to the student prior to the project. This project can consist of architectural designs or mechanical designs.

## 1<sup>st</sup> House Project:

Students will work in groups to design a floor plan that meets certain criteria. Each student should have a role in the group and tasks to complete.

# 2<sup>nd</sup> House Project:

Students will work in groups to design a complete set of house plans that meets certain criteria. Each student should have a role in the group and tasks to complete.

### **Final Exam:**

The student's final exam grade will be determined by averaging the Term Project grade, and the Portfolio Grade.

#### **Portfolio:**

Each student is expected to keep a 3-ring binder which will serve as a professional portfolio. This Portfolio will include the following-

- 1. Table of contents with dividers
- 2. One section for the course syllabus
- 3. Assigned Drawing check off list section
- 4. Term Project Section
- 5. Portfolio Evaluation Section
- 6. AutoCad Exercises
- 7. A section for the first house
- 8. A section for the second house
- 9. Handouts and Exercises
- 10. A section for any group exercises
- 11. A burned CD that includes all of your Drawings

#### **Drawing Assignment List:**

The instructor assign drawings ,at their discretion, that reinforce concepts taught in class.

# Grading

Grading will be based on a point system. You accumulate points throughout the semester and then your grade will be based on the percentage of points that you earned.

Quizzes and other assignments -	20 points
Term Project -	100 points
House Plans -	100 points
Group Projects-	100 points
Drawings -	20 Points Each

All grades will be determined by adding up the total points accumulated by the student and divided by the possible points and multiplied by 100.

#### Late Policy

Assignments which are late more than one day will not receive any credit

### **Drawing Equipment:**

Each student is responsible for your computer for the duration of the year. Treat your workstation with respect!

### **Rules:**

- 1. Come to class on time and prepared for class. No one will be allowed to leave for materials, which should be present once class has started. Bring a pass if you are late, 3 lates without a pass will result in referral to office.
- 2. Treat other students and teacher with respect
- 3. Comply with all requirements and guidelines in the student handbook.
- 4. Wear safety glasses when in the work area.
- 5. Respect all tools and machinery. This includes putting things back and cleaning up when you are done.
- 6. Comply with all safety rules and regulations.
- 7. No horsing or fooling around.

### **Consequences:**

- 1. Verbal Warning-From Teacher
- 2. Time Out-Student will be asked to leave work area and sit in front of the room for the remainder of the period.
- 3. Conference with student-Teacher and student will have a conference
- 4. Phone call or letter to parent or guardian.
- 5. REFERAL TO OFFICE.

\*\* ANY STUDENT THAT VIOLATES A SAFETY RULE DURING WORK TIME WILL BE IMMEDIATELY REMOVED FROM THE ACTIVITY FOR THE REMAINDER OF THE PERIOD. THE SECOND VIOLATION WILL RESULT IN AFTER SCHOOL DETENTION WITH ME

Student Name

Return to Mr. Howard by \_\_\_\_\_

I have read and understand the above expectations and will contact Mr. Howard with any

problems or questions.

Student signature: \_\_\_\_\_

Parent or Guardian signature: \_\_\_\_\_