

September 3, 2014

Dear Parent or Guardian:

Welcome to the first week of *Computer Aided Drafting & Engineering I* at Peninsula High School! I am pleased to see your son/daughter enrolled in this class this semester and am looking forward to teaching your student to communicate successfully with a graphic language that is very powerful in today's design world.

My instruction is backed up by a website: [www.johnriebli.com](http://www.johnriebli.com) where you can check on daily work and projects. You can also contact me directly from my website.

This year we have added a 3D printer to the program. We are anticipating working with the City of Gig Harbor and several architects to build models of buildings around the Gig Harbor Basin which will be researched and created by students and on display at city hall.

We will start class with a 3D program called Google Sketchup which can be downloaded to any computer at home and is free. It is a capable program to produce modeled and measured drawings quickly and gives us access to tutorials and extensive libraries of objects.

A second program we will be mastering is Autocad which is the grand dad of computer design. We may also use Solid Works or Chief Architect. That is to be determined.

We will be creating interesting and colorful drawing databases. Students will be learning to use geometry and math to discover increasingly complex drawing solutions to problems posed in class.

Attendance is important in that much of what we study is only available in class. Ten unexcused absences will result in no credit. This is a lab setting, working hands-on in an environment where help is always available. Missing major class segments can be very debilitating and there really are no workbooks or texts that can substitute for being present.

Grading is based on the successful completion of drawings and projects. All projects are rated on a scale of 1 to 5 or 1 to 10. Projects rating scales are as follows:

10 Point Projects:		
10	A	
9	B+	
8	B	
7	C	
6	D	Re-do
5	F	Re-do

## Classroom Attendance Policy

Being in class and being part of the lesson is important to student success. In order to support student learning and high expectations, I have instituted an attendance policy for this course.

**The maximum number of absences allowed per class is ten. This includes excused and unexcused absences. The classroom teacher will notify the student when he/she is nearing the absence limit, and again when he/she has reached or exceeded 10 absences and are in jeopardy of losing credit. Once the student is notified, they will be responsible for appealing the loss of credit in writing and attending an appeal meeting with the Dean of Students, or administrator if she is not available. An academic probation plan may be instituted to help guide the student toward a successful end to the semester.**

Interim grades and final grades are a composite of the grades earned on class assignments, projects, and tests. If at any time during the semester you have any questions about grades or assignments, please feel free to contact me at Peninsula High School Ph. 253.530.4400 or email: [rieblij@psd401.net](mailto:rieblij@psd401.net) or go to [johnriebli.com](http://johnriebli.com)

I am looking forward to an exciting year at Peninsula.. We have 29 Cad workstations. Our primary software is Google Sketchup, AutoCad LT 2008, Chief Architect, Solid Works and *Rhino*, version 4.

In class I utilize a 60" flat screen to visually demonstrate the complex drawing commands. We also have several printers available for project output. We are very proud to have this outstanding program available for students interested in engineering, architecture, or graphic communication.

Attached is a course outline. Please examine the attachments and, again, I am happy to answer any questions. Email: [rieblij@psd401.net](mailto:rieblij@psd401.net). My direct line at school is 253.530.4400.

Sincerely,

John Riebli  
Technical Design Instructor  
Peninsula High School

*Cadd-Student Name* \_\_\_\_\_

Parent Signature \_\_\_\_\_

Parent Email: \_\_\_\_\_

## Cadd 1

2014-2015

Instructor: John Riebli

Room 625

Peninsula High School

### Course Overview

**CADD** works with sketching and computer modeling techniques. Students learn standard conventions associated with communicating graphically to a technical audience. They begin applying geometric concepts to develop increasingly complex models to render, animate, and to convert in to two dimensional representations of three dimensional views. Scale, dimensioning, lighting effects and some animation will be mastered.

Students will incorporate basic computer drawing operations within a context of three dimensional coordinate systems to produce increasingly complex projects. They complete exercises designed to teach them skills working with lines, surfaces and solids. They learn to work with snap, viewports, control points, layers, bitmap images, object properties, rendering software and many other modeling features. In addition, students will apply the design principles of balance, gradation, repetition, contrast, harmony, dominance, and unity in developing their own aesthetic.

An overview of three-dimensional uses of Cad is the focus of this class. Students will complete this class with an increased understanding of the role of three dimensional modeling and design within a wide range of career possibilities.

### Primary Goals for Cadd

Computer created documents will adhere to these standards:

- Student name and date on all drawings.
- Drawing is to be accurate.
- Drawing is to be to scale with scale noted.
- Drawing is to be dimensioned and notated.
- Drawing is to include detail sufficient to build the object drawn.

Students will work through exercises and projects to develop the skills to produce increasingly complex drawings which must adhere to these standards. Drawings will progress from simple blocks to complex blocks, from simple assemblies to more complex assemblies. And there will be a project that pulls together the learned skills to create an original concept drawing: for example, student will create a display cabinet designed to accommodate the objects of a hobby or interest in accordance with solid design principles, a 3-d rendering and an exploded view adhering to the above document standard.

At the end of the course students will create an original house plan and construct a physical model of the plan. The model and drawing concept will be part of a formal presentation to the class.

## Units of Study

<p>1. Google Sketchup</p> <ul style="list-style-type: none"><li>◆ Edges</li><li>◆ Surfaces</li><li>◆ Pushing-Pulling</li><li>◆ Measuring</li><li>◆ Dimensioning</li><li>◆ Added features</li><li>◆ Edit/Transform</li></ul>	<p>2. Hand Drawing</p> <ul style="list-style-type: none"><li>◆ Lines &amp; Lineweight</li><li>◆ Measurement</li><li>◆ Orthographic Projection</li><li>◆ Dimensioning</li><li>◆ Scale</li></ul>	<p>3. Rhino Basics</p> <ul style="list-style-type: none"><li>◆ Draw commands: curve, free form, circle, arc, ellipse, parabola, polygon, rectangle, conic, helix, spiral.</li><li>◆ Edit commands: erase, copy, offset, array, mirror, move, rotate, fillet, chamfer, blend.</li><li>◆ Coordinate drawing conventions.</li><li>◆ Lighting</li><li>◆ Rendering</li><li>◆ Animation</li></ul>
<p>4. Auto Cad</p> <ul style="list-style-type: none"><li>◆ Lines</li><li>◆ Edit: Extend, fillet, chamfer, blend, offset.</li><li>◆ House plans</li><li>◆ Printing</li></ul>	<p>5. Chief Architect</p> <ul style="list-style-type: none"><li>◆ Wall commands</li><li>◆ Doors &amp; Windows</li><li>◆ Cabinets</li><li>◆ Interior fixtures</li><li>◆ Roof creation</li></ul>	