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<b>LESSON 2-1</b>	<b>PLANNING A PROJECT - OFFICE FLOOR PLAN</b>
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**Topics covered in this Lesson:**  
Starting and Organizing a Project

This lesson will have you using the tools you learned in the [first level](#). Believe it or not, if you understand the commands taught in the first level, you understand almost all of the common commands used in AutoCAD 2D Drafting - for any version.

i'm not referring to being a Project Manager in this tutorial, but organizing a project in AutoCAD takes a standard approach. Consider drawing a room a 'project', or a floor. On your first day of the job given a project and asked to draw it. What you draw will depend upon the 'Scope of Work' 

This example will assume that you've been put in a small room and told to draw it. The first thing you want to do is set up your drawing. There are a few basic steps to approaching EVERY drawing you do in CAD.

1.

**Make sure you have the ability to draw it.** See if there is anything in the drawing or area that you would not be able to reproduce. You should also see if you have all the information you need to complete the drawing, or at least get a majority of it done. For example, if there are angled walls, can you find that angle?

2. Are you using a template to start the drawing with? Your Project Manager should provide you with either the standard company template, or a client's.

3.

Once you have this basic information, you can begin. As you can see, there is a bit you have to do before drawing your first line. Get into the good habit of beginning your drawings properly and never with the attitude that you can always "Fix it later!"

AutoCAD also has a large number of templates to get you started. You can find these through the New Drawing dialog box.

Once your drawing is set up, think about how you will actually draw it. You should start with the most basic components first. Remember that it is just like building a structure. Start with the foundation and add more detail as you go. Look at the outer walls and start there. Then add more details such as the door openings, doors, windows, etc. Finish up with the details that are on the scope of work - fire extinguishers, outlets, etc. Be careful with your measurements, because if you make a mistake at the start, it will cause BIG problems later on as you continue through the drawing.

A general rule I use is to draw like I would build it. This basic approach will at least give you a starting point for any project in any discipline.

Just like in Previous Lessons, start AutoCAD and a new drawing by using the menu option **File > New**. You will see a dialog box open that asks you to select a template drawing to use. In these examples you will use AutoCAD's default template. This will give you the chance to practice creating and using layers. Have a look at the types of objects in the drawing example and create layers for each.

The first two projects are designed using imperial, architectural units (ie: **3' - 6"**) as opposed to the decimal measurements you used in the previous level. If your template is not set to Architectural units, you can do this by using the DDUNITS command and set "Length > Type" to Architectural.

#### Notes on entering Architectural Units:

Entering Architectural units requires a different way of inputting numbers than regular decimal units. Here are some ways of entering them:

**11'10-1/2"**    **11'10-1/2**    **3'** (or) **36"** (or) **36**

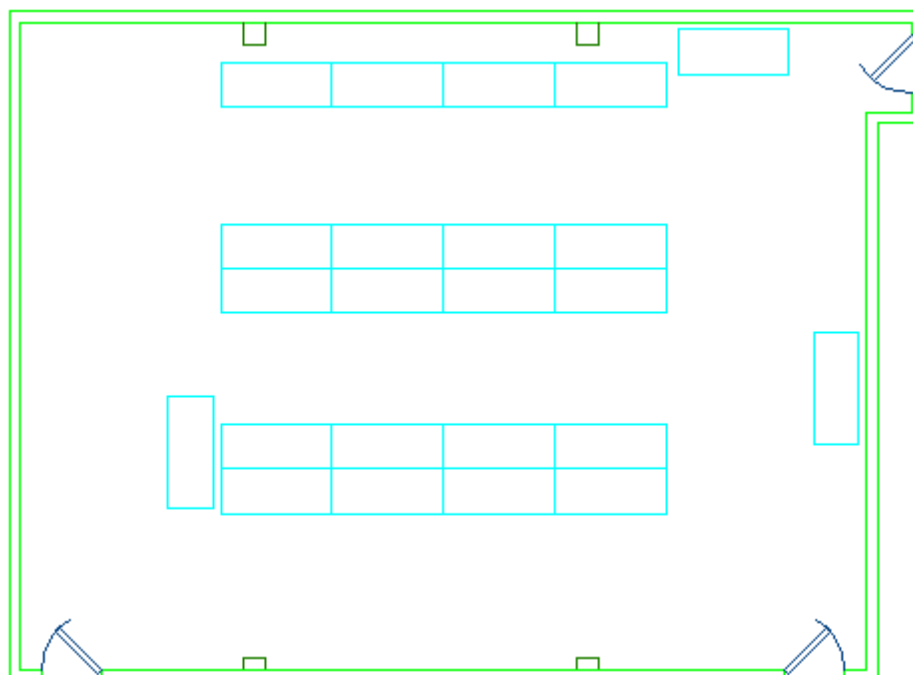
You don't ever need to use the inch symbol. Inches can be entered instead of feet (ie 48=4').

#### Computer Room Example

Start a new drawing and create the [layers](#).

Where to start:

Here is the room you will be drawing. Imagine that you just walked in the door at the top right, have a look around...



You'll see two more doors, and some parts of the wall sticking out - where the columns are. Imagine that you have to measure it, and draw it.

You're ready to start drawing now. As mentioned above, start with the outside and work your way in. If you are drawing the first project, you can easily draw the walls (using [DDE](#)), then offset them by the thickness of the wall. From there, it's just a matter of inserting the door openings. I usually do that by offsetting lines, then trimming away what I don't need. For the doors themselves, just draw a rectangle and rotate it (later on you will learn about blocks for this). So with just a few commands, you can draw this room - all the commands you learned in Level 1. Of course, there are many ways to draw the same project.

Once you have drawn the basic plan, dimension it (refer to [Level 1-8](#) lessons). From the "Computer Room" plan you will be adding computers and other accessories to the desks later in the course, so save the file when you are done.



[View the video about setting up the Computer Room drawing \(Part 1\).](#)



[View the video about drawing the Computer Room project \(Part 2\).](#)

Below are 3 projects to work on. Draw them and think about how you might approach them.

PROJECT	GIF IMAGE	AUTOCAD DWG FILE
Project # 1 - Computer Room		
Project # 2 - Office Space		
Project #3 - Cabin		



[View the video about drawing the Office Space \(Project #2\).](#)



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