

## Guide to the Tutorial Files

### Blender Tutorials

A lot of tutorials for blender are available as videos so if that is the way you prefer to learn then have a browse for some. The tutorial documents included here are good ones for the basics and beyond. Please be aware that some of them have been written for the older versions of Blender when the interface was somewhat different. If you are using a tutorial that describes an older version of Blender then the *search* feature that is part of the “Space bar” menu will allow you to find the current location of the command referred to. The shortcut keys tend to be the same no matter which version of Blender is being used.

#### ***How to design a model compatible with 3D printing?***

This tutorial is primarily about how to use the Sculpteo 3D printing service, but it has some good advice about producing good quality 3D Printable models. The version of blender used to illustrate the process is an old version before the current interface layout was introduced so just be aware that the tools shown will be in different locations in the versions of Blender that are available now.

[http://www.sculpteo.com/static/0.30.0-54/documents/tutoriel\\_3d\\_printing\\_sculpteo.pdf](http://www.sculpteo.com/static/0.30.0-54/documents/tutoriel_3d_printing_sculpteo.pdf)

#### ***Blender Basics Classroom Tutorial Book – 4th Edition by James Chronister***

This is a very large “Basic” guide that covers a lot of what Blender can do – however you will only need a small subset of that and I would suggest Chapter 3 is the most value to you. The version of Blender used to illustrate this is Blender 2.5 which has an interface very similar to the Blender 2.72 interface you will be using.

[http://www.cdschools.org/cms/lib04/PA09000075/Centricity/Domain/81/BlenderBasics\\_4thEdition2011.pdf](http://www.cdschools.org/cms/lib04/PA09000075/Centricity/Domain/81/BlenderBasics_4thEdition2011.pdf)

#### ***Precision Modelling – A Guide to Modelling Parts and Components Accurately Using Blender by Robert Burke***

This is a guide to doing engineering modeling in Blender. It does not go into the basics so much but is a valuable guide if you decide that Blender is for you and you really want to get your teeth into some engineering design.

[http://homepage.ntlworld.com/r.burke2/precision\\_modelling1.html](http://homepage.ntlworld.com/r.burke2/precision_modelling1.html)

or more directly

[http://homepage.ntlworld.com/r.burke2/precision\\_modelling\\_006.pdf](http://homepage.ntlworld.com/r.burke2/precision_modelling_006.pdf)

or

<http://www.scribd.com/doc/242736262/Precision-Modelling-006>

#### ***Blender Wiki PDF Manual***

I found this after completing the Workshop CDs and so it is not included on them. This is the Blender Wiki content in pdf form .... all 1351pages worth but for slightly older versions of Blender than what is typically used now..

[http://graphical.org/manual/blender\\_manual\\_20090129.pdf](http://graphical.org/manual/blender_manual_20090129.pdf)

### Sketchup Tutorials

Sketchup has some built in tutorials and exercises that can be accessed when you first open Sketchup and also access at any time once the application is running. These are well worth investigating. The following tutorials are various introductory guides.

#### ***Sketchup Getting Started***

This is the official guide to Sketchup produced by Sketchup themselves. This guide explains the tools and how to use them very well.

<http://help.sketchup.com/en/article/116174>

a cut down version compiled into a .pdf is available here;

<http://faculty.kirkwood.edu/jlopez/sketchup-quick-start.pdf>

### **Google SketchUp-A Brief Introduction by Luana Valentini**

This is a good introduction to the tools. The first half of the document covers the interface and what the various tools do. It has some good tips on how to use the tools effectively. The latter half of the document gets into using Sketchup for GIS models which is less useful to you.

<http://geomatica.como.polimi.it/corsi/internetGIS/GoogleSketchUp8.pdf>

### **Google SketchUp For Dummies by Aidan Chopra**

Part of the Dummies guide series. This will give you a very complete understanding of Sketchup.

<http://it-ebooks.info/book/928/>

### **SketchUp Instructions**

This is just a good overview of Sketchup and using some of the most basic tools. I would suggest "Sketchup Getting Started" is a better guide.

<http://academics.triton.edu/faculty/fheitzman/Sketchup%20basics.pdf>

There are a number of books written about using Sketchup. These are primarily for architectural models and models to be inserted into Google earth, but the processes of building the model are the same as you will be doing for creating a 3D Printable model. The following book samples are useful because they typically include the introduction to Sketchup chapter and have some later examples of techniques that allow you to add detail to your models.

### **Google SketchUp Pro 8 Step by Step by João Gaspar**

This is just a sample chapter that has a brief introduction to the Sketchup environment and some of the most basic tools.

<http://www.thesketchupbook.com/areaexclusiva/sk8/sk8bookc1.pdf>

### **Google SketchUp 7 Hands-On Basic Exercises by Bonnie Roskes**

This takes some samples out of the "Google SketchUp 7 Hands-On" book. It needs to be read in conjunction with a guide like "Sketchup Getting Started" to cover the basics, but some of the hints and tricks are likely to be useful for getting detail into your models.

[www.3dvinci.net/PDFs/SU7BasicsSampler.pdf](http://www.3dvinci.net/PDFs/SU7BasicsSampler.pdf)

### **Google SketchUp and SketchUp Pro 7 Bible**

I found this too late to include in the CD but here is a link to a massive tome on SketchUp

<http://www.cwu.edu/~cattinw/Courses/IET%20521%20Product%20Design%20and%20Development/Google%20SketchUp%20and%20SketchUp%20Pro%207.pdf>

## **Sculptris Tutorials**

Sculptris is a very intuitive tool and so it is likely that you will not need any tutorials but the tutorials included here are useful for some of the hints and tricks that may not be so obvious. Most Sculptris tutorials are video based and so it is worthwhile having a browse for some of these because they will probably better illustrate the process than the static pdf pages will.

### **Sculptris Alpha 6 Guide**

This is the official guide which comes with Sculptris. It explains all of the tools and how to use them and has a heap of quite inspirational pictures too. You will find that the installer for Sculptris includes this document anyway.

<http://www.scribd.com/doc/71353238/Sculptris-Alpha6-Documentation>

### **Sculptris Cheat Sheet**

This is a useful 1 page guide to the interface.

[http://members.casema.nl/jw.v.dronkelaar/sculptris\\_cheat\\_sheet.pdf](http://members.casema.nl/jw.v.dronkelaar/sculptris_cheat_sheet.pdf)

***Preparing your Sculptris model for 3D printing at [www.Shapeways.com](http://www.Shapeways.com) by WiKKiDWidgets***

Well .... actually most of this document concerns using Blender to check and fix models before putting them up on Shapeways. The version of Blender used to illustrate the process is quite old and the current interface is quite different, so just be aware that this tutorial may not be as useful to you as the title suggests.

[www.wikkidwidgets.com/\\_resources/Sculptris\\_to\\_Shapeways.doc](http://www.wikkidwidgets.com/_resources/Sculptris_to_Shapeways.doc)