

Table of Contents

Training Course 1. Developing Basic Skills

1.	How to start using SketchUp	10
	1.1 Tour and tools overview	11
2.	How to begin to draw in 2 dimensions.....	15
	2.1 Drawing a single straight line	15
	2.2 Inference	16
	2.2.1 Inference Cues	16
	2.2.2 Linear Inference	16
	2.2.3 Point Inference	17
	2.3 Drawing a rectangle with single straight line	18
	2.4 Using the Erasing Tool	20
	2.5 Using the Undo and Redo Tools	20
	2.6 Selecting one element and various elements at the same time	21
	2.6.1 Adding and subtracting from a selection set	21
	2.6.2 Adding to the selection set	21
	2.6.3 Changing selection status for an entity (Shift)	22
	2.6.4 Subtracting from the selection set	22
	2.6.5 Selecting multiple entities	22
	2.7 Drawing with the Rectangle Tool	23
	2.8 Changing axes to draw elements not parallel to green and red direction.	23
	2.9 Drawing a square	25
	2.10 Drawing a circle and a polygon	25
	2.11 Drawing an arc	28
	2.12 Freehand tool	29
	Practice Chapter 2	29
	1. Draw a sofa in top view	30
	2. Draw a rectangular table in top view	32
	3. Draw a hexagonal table in top view	35
3.	How to draw in 3 dimensions.....	40
	3.1 Views	40
	3.2 Drawing in 3 dimensions and using the Blue Direction	41
	3.3 Locking an inference	42
	3.3.1 Forcing an Inference Direction.	43
	3.4 Drawing a box with Push/Pull Tool	44
	3.5 Creating Voids with Push/Pull	45
	3.6 Copying with Pull/Push Tool. Creating a new Push/Pull starting face	46
	3.7 Repeating a Pull/Push operation with the same dimension	46
	3.8 3D inferences	47
	3.9 The camera Tools: Orbit, Pan, Zoom, Zoom Extend, Zoom Window, Previous, Next, Field of View, Focal Length	48
	3.9.1 Orbit tool, Zoom Previous /Next	48
	3.9.2 Orbiting with a three button mouse	48
	3.9.3 Pan tool	49
	3.9.4 Panning with a three-button mouse	49
	3.9.5 Zoom tool	49

3.9.6	Zooming with a three-button mouse	49
3.9.7	Centering the point of view	49
3.9.8	Changing field of view	49
3.9.9	Changing focal length with the Zoom Tool	50
3.9.10	Zoom Window Tool	50
3.9.11	Zoom Extents Tool	50
3.10	Selecting an edge, a face and many objects at the same time	50
3.10.1	Selecting connected entities using the Select context-menu item	51
3.10.2	Adding and subtracting from a selection set	51
3.10.3	Changing selection status for an entity (Shift)	52
3.10.4	Subtracting from the selection set	52
3.11	Follow me	52
3.11.1	Follow Me on a face	52
3.11.2	Manually extruding a face along a path	54
3.11.3	Follow Me by pre-selecting edges	55
3.12	Offset	56
3.12.1	Offsetting a face	56
3.12.2	Offsetting lines	57
3.12.3	Repeating an offset with the same distance	57

Practice Chapter 3 58

1.	Draw a bookcase	58
2.	Draw an ottoman	62
3.	Draw a rectangular table with rounded base	64

4. How to manipulate objects in SketchUp 67

4.1	Tape Measure Tool	67
4.1.1	Measuring distances	67
4.1.2	Create guide lines and guide points	68
4.1.3	Scale a model	69
4.1.4	Lock a measuring line to a specific inference direction	70
4.2	Protractor Tool	70
4.2.1	To create angled guide lines and angled faces	70
4.2.2	Measure an angle	73
4.3	Move Tool	73
4.3.1	Move the object	74
4.3.2	Move an edge or single entity	74
4.3.3	Moving several entities	75
4.3.4	Move vertices	75
4.3.5	Moving or stretching with Autofold	76
4.3.6	Forcing Autofold Behavior	77
4.3.7	Locking a move to the current inference direction	77
4.3.8	Locking a line to a specific inference direction	77
4.3.9	Resizing curves with the Move Tool	77
4.4	Use Move Tool to copy	78
4.4.1	Linear arrays	79
4.4.2	Creating copies at an equal distance apart	81
4.5	Rotate Tool	82
4.5.1	Rotation with Autofold	83
4.5.2	Making rotated copies	84
4.5.3	Defining a non standard rotation axis	85
4.6	Scale Tool	86
4.6.1	How to scale geometry	86
4.6.2	Mirroring geometry using the Scale tool	87

4.7	Divide	89
4.7.1	Dividing a line or arc into equal segments	89
4.7.2	Splitting a line	89
4.8	Intersect with Model	89
Practice Chapter 4.....		90
	1. Create a room with an open door, window and opening	90
	2. Create a wainscoting and a crown molding	95
	3. Create a lamp with a spherical base	99
	4. Create a chair layout for a conference room	102
	5. Create a Queen Anne	106