

IET 260
NURBS Modeling

2012 Six-week course schedule

Week	Selected Commands	Tutorials	Resource(s)	Assignment
1	Menus, Toolbars, Flyouts, Viewports, Command area, Zoom, Pan Line(s), Polyline, Coordinates	Rhino User Interface http://vimeo.com/2838585 Basic Object Types in Rhino http://vimeo.com/2841008	Rhino basics (p. 3-30) Creating 2D objects (p. 33-48) Precision Modeling(p. 49-73)	Jing screen capture of castle on p.25 Jing screen capture of layer dialog box p. ~42 Arrow p. 54 V-block p. 57 Chair p. 67
2	Helix, Spiral, Arcs, Circles, Free-form curves Ellipse, Polygons	Helix Spring www.Rhino3d.com/tutorials/howto/helixspring/helixspring.htm Curve Drawing www.Rhino3d.com/4/help/Commands/CurveDrawing.htm	Precision Modeling continued...(p. 74-102)	Link p. 80 Arc1 p. 82 Arc2 p. 86 Toy p. 88 Curve p. 93 Helix-Spiral p. 96 Screwdriver p. 99 Quiz
3	Filletts, Join, Trim, Chamfer, Blend, Move, Copy, Array, Undo/Redo, Rotate, Mirror, Join, Scale, Group, Split, Extend, Offset	Filleting Methods for Solids http://vimeo.com/3275232 Establishing Geometric Continuity http://vimeo.com/2850159	Editing Objects (p. 103-138)	Filletex p. 113 Ex. 36-42 p. 123 Ex. 43 p. 124 Gasket1 p.137 Cam p. 137 Link p. 138 Quiz
4	Edit points and knots, surface creation and rebuilding, control point editing, splitting surfaces, blending two	Control Point Editing http://vimeo.com/4283768 Developing Surfaces (Shoe) http://www.Rhino3d.com/tutorials/howto/miri_shoe/shoe_tutorial.htm	Point Editing (p. 139-146) Deformable Shapes (p. 149-163) Solid Modeling (p.165-172)	Exam 1 Ex. 53 p. 146 Ex. 54 p. 160 Ex. 55 p. 166

	surfaces, lighting and rendering			
5	Solid primitives, Polysurfaces, Closed surfaces, Isocurves, Revolve, Loft, Sweeps, FilletSrf, BlendSrf, Rail revolve, Extrude curve	Sweeps http://www.Rhino3d.com/4/help/Commands/Sweeps.htm Loft http://www.Rhino3d.com/tutorials/howto/loft/index.htm	Creating Surfaces (p.173-216)	Ex. 56 p. 174 Ex. 57 p. 177 Ex. 58 p. 186 Ex. 59 p. 190 Ex. 60 p. 191 Ex. 61 p. 192 Ex. 62 p. 194 Ex. 63 p. 196 Ex. 64 p. 197 Ex. 65 p. 199 Ex. 66 p. 208 Quiz
6	Import, Export, Render, Dimensions	Rendered Lighting http://www.itchy-animation.co.uk/tutorials/light01.htm	Importing and Exporting Models (p. 217-219) Rendering (p. 221-228) Do not need to do rendering with Flamingo Dimensions (p. 231-234)	Ex. 67 p. 218 Ex. 68 p. 221 Ex. 69 p. 232 Project...TBD Final Exam

Note: schedule subject to additions and change with adequate notice.