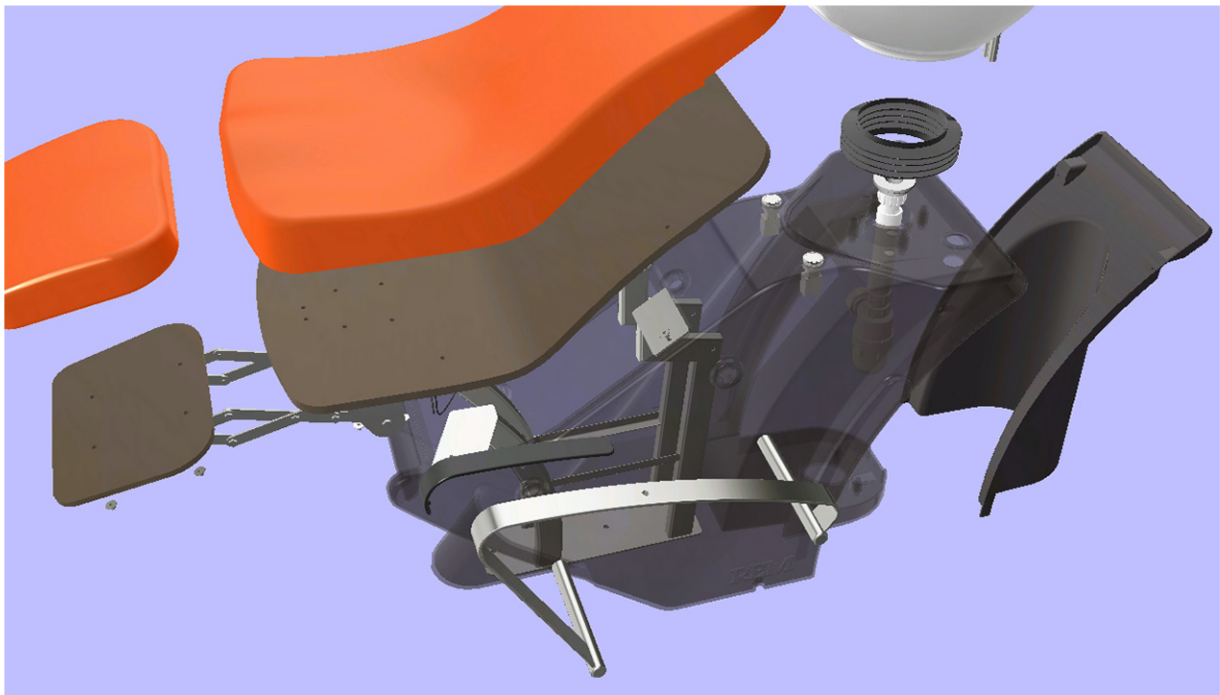
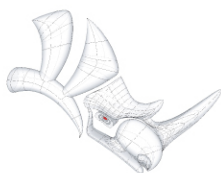


SimplyRhino

sales, training and support



Intermediate/Advanced Rhino Outline & Objectives



RhinoCeros
NURBS modeling for Windows

Simply Rhino Limited
0208 498 9900
www.simplyrhino.co.uk
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Simply Rhino - Intermediate Rhino

Course Outline

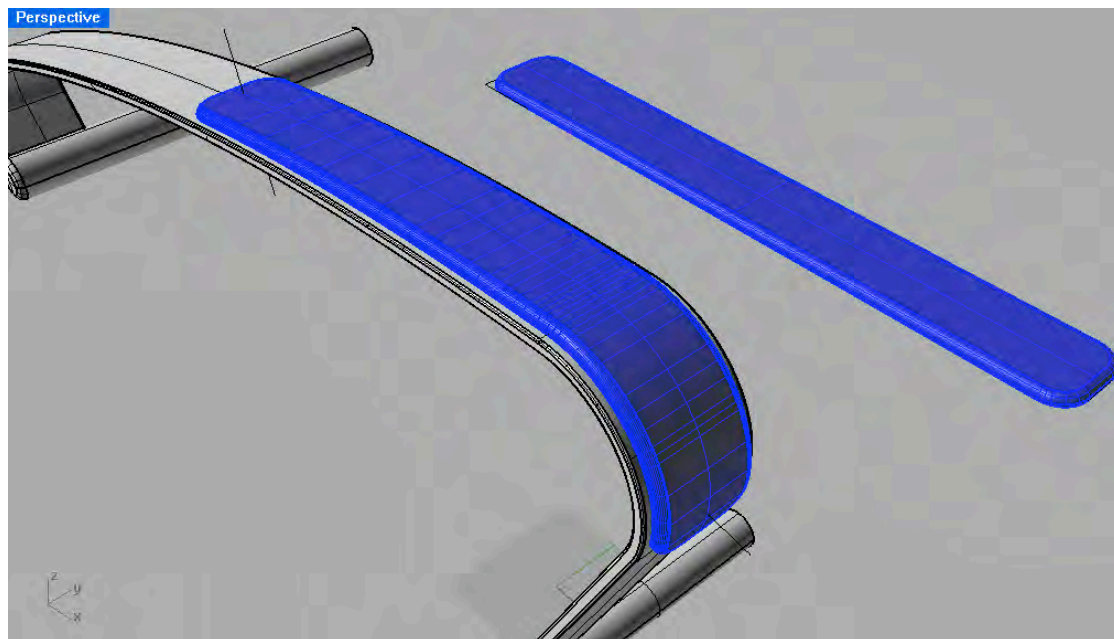
This course is geared towards design and engineering professionals of all disciplines who have a good basic understanding of Rhino but wish to improve their overall knowledge to become more confident and productive with Rhino. The course contains both intermediate and advanced material, and concentrates on creating cleaner geometry and explaining NURBS in more detail before moving on to practical examples demonstrating efficient modelling techniques. planning projects and some advanced surfacing. Although the class follows a clearly defined structure there is scope for trainees to discuss individual work examples and work on live project examples.

Structure

This comprehensive, fast moving two day class starts with a brief refresher on Rhino basics before moving on to discuss NURBS topology in more detail and looking at a range of tools and strategies useful in creating clean 'optimised' geometry. The second day takes a more project oriented approach and looks at a project from initial sketches through to a detailed model. Large model management, export and importing data, 2D drawings and modifications via the new UDT tools are also discussed.

Prerequisites

Trainees should have ideally completed the Simply Rhino Level 1 course and have been using Rhino for at least eight weeks.



Curriculum

Day One

Geometry, Curves and Surfaces

Rhino Refresher

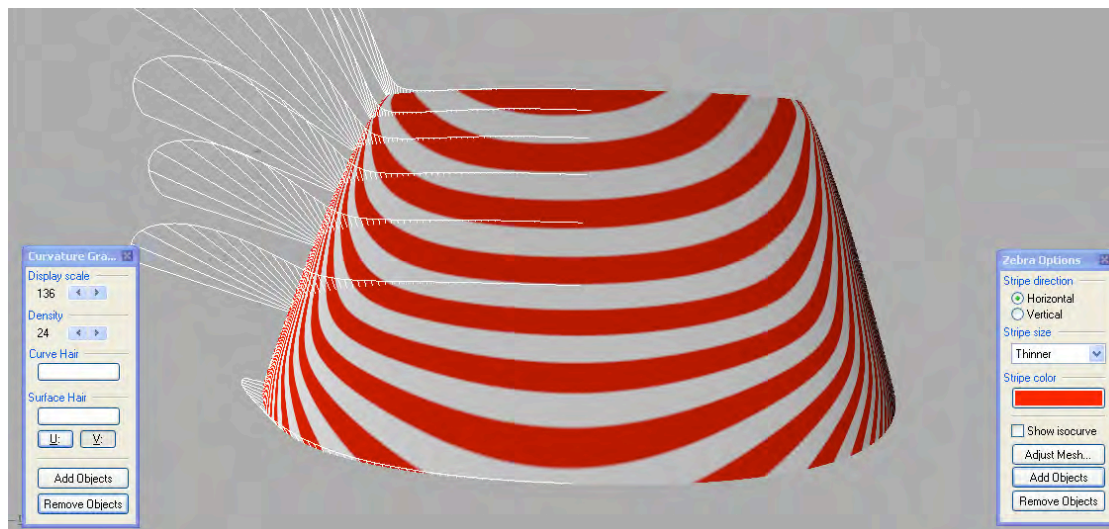
Modelling Constraints
Custom Construction Planes
Modelling History
Viewport Properties and Page Layouts

NURBS Topology

NURBS geometry explained
Curve and Surface Degree
Rational v Non-Rational Geometry
Strategies for Rebuilding Curves and Surfaces
Point Editing

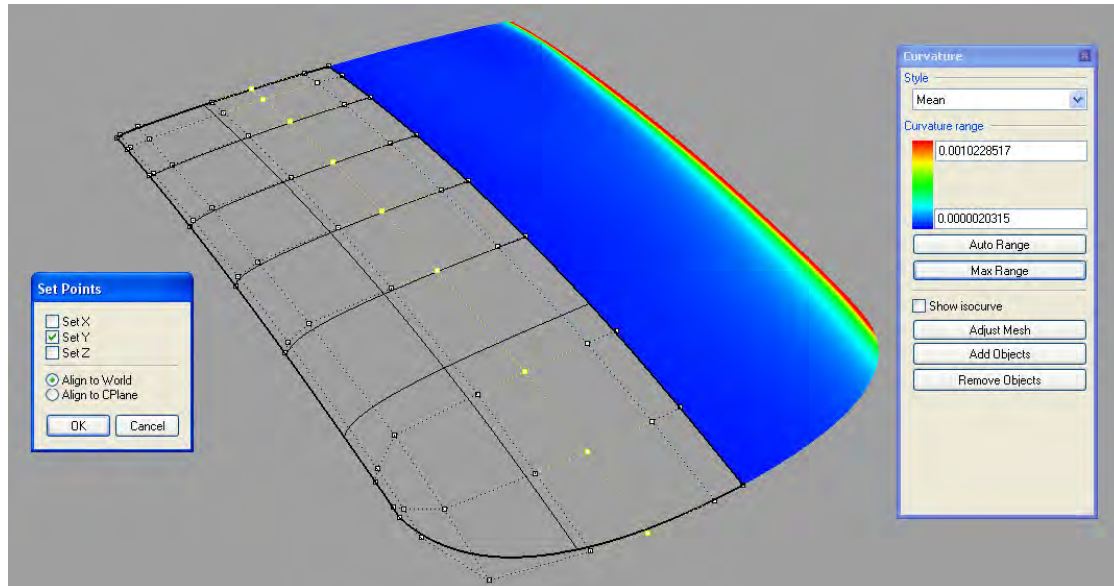
Curve & Surface Evaluation

Curvature Graph and G-Con
Environment Maps
Zebra Stripes
Curvature Analysis
Match, Merge and Symmetry



Creating Optimised Surfaces

Surface Tools that can match continuity
Surface Building Strategy
Match and Merge
Blend Srf
Symmetry
Brief Introduction to T-Splines for Rhino

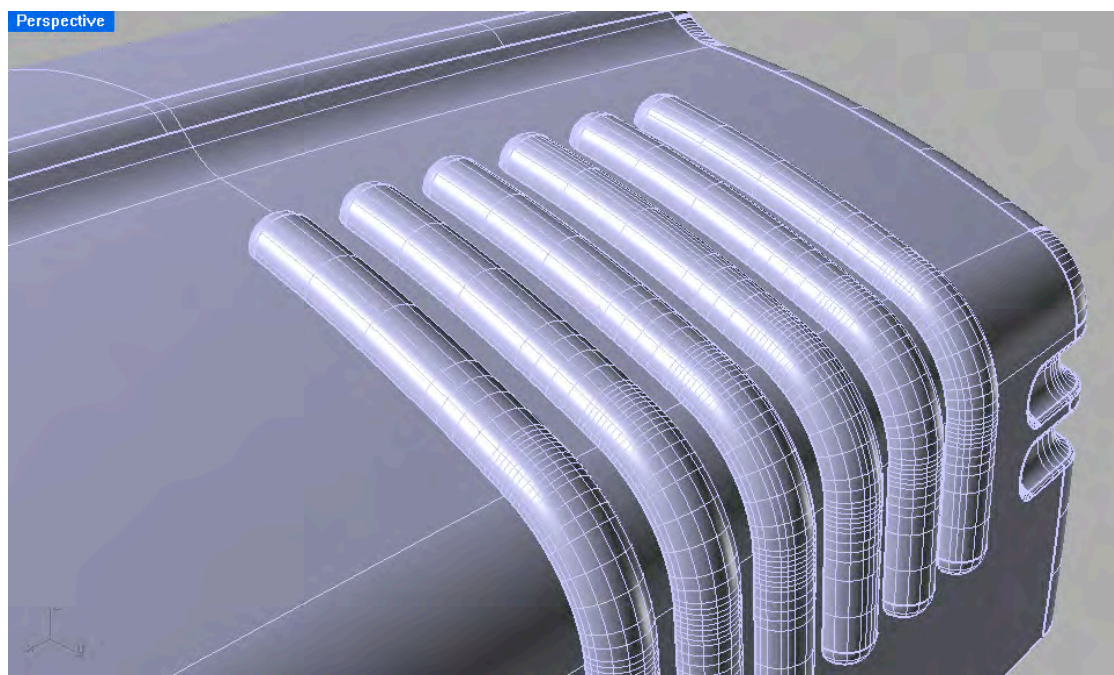


Advanced Surface Editing

A look at some of the advanced surface editing tools within Rhino.

Orient and Array Tools

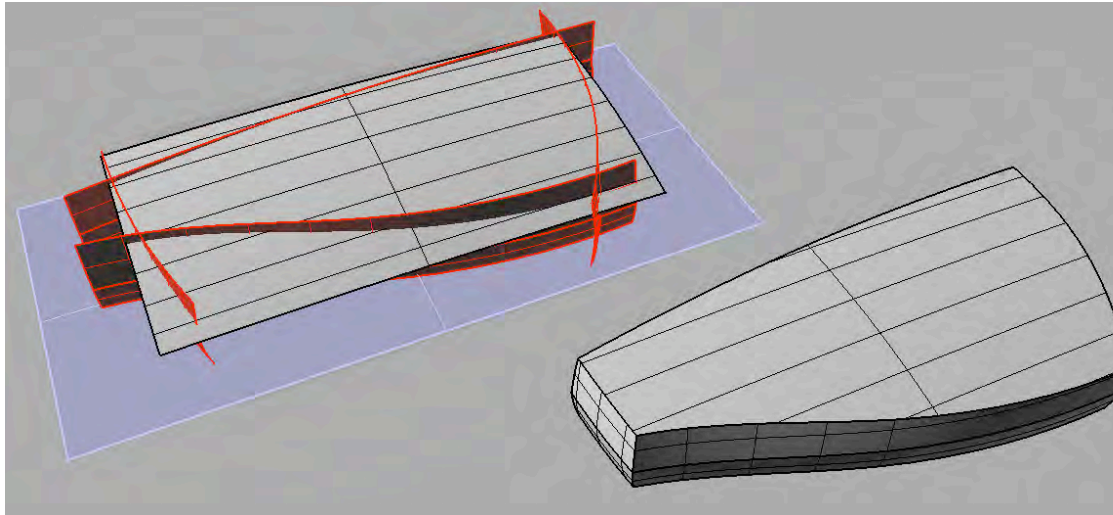
Using Rhino's intelligent orient and array tools to apply detailing (as image below) and repetitive structural elements.



Day 2 - Modelling Strategy

Building a Concept Model

Working with Sketches
Background Bitmap
Advanced Picture Frame Usage
Importing 2D Data
Quick Conceptual Model Strategy

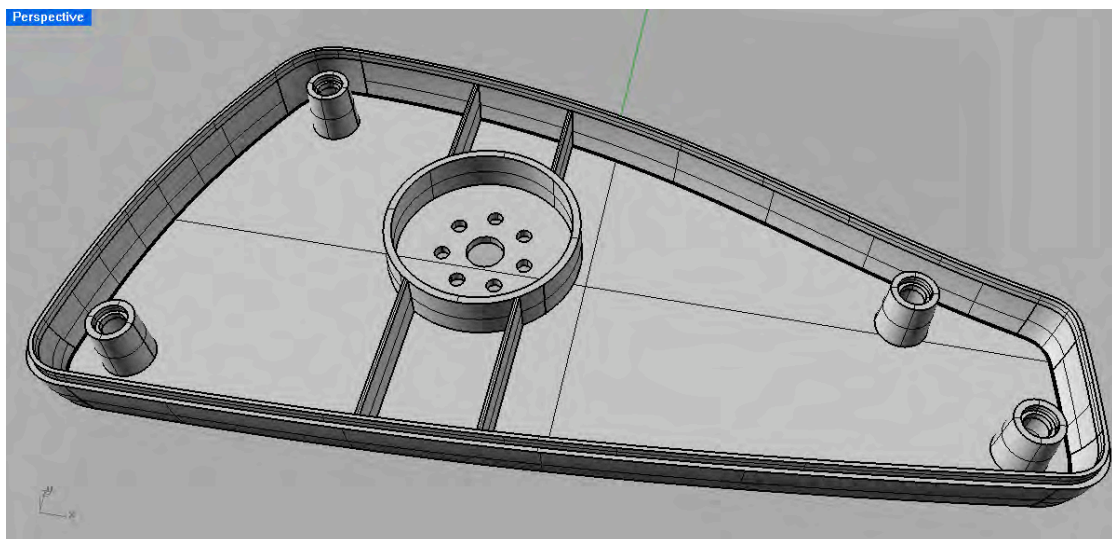


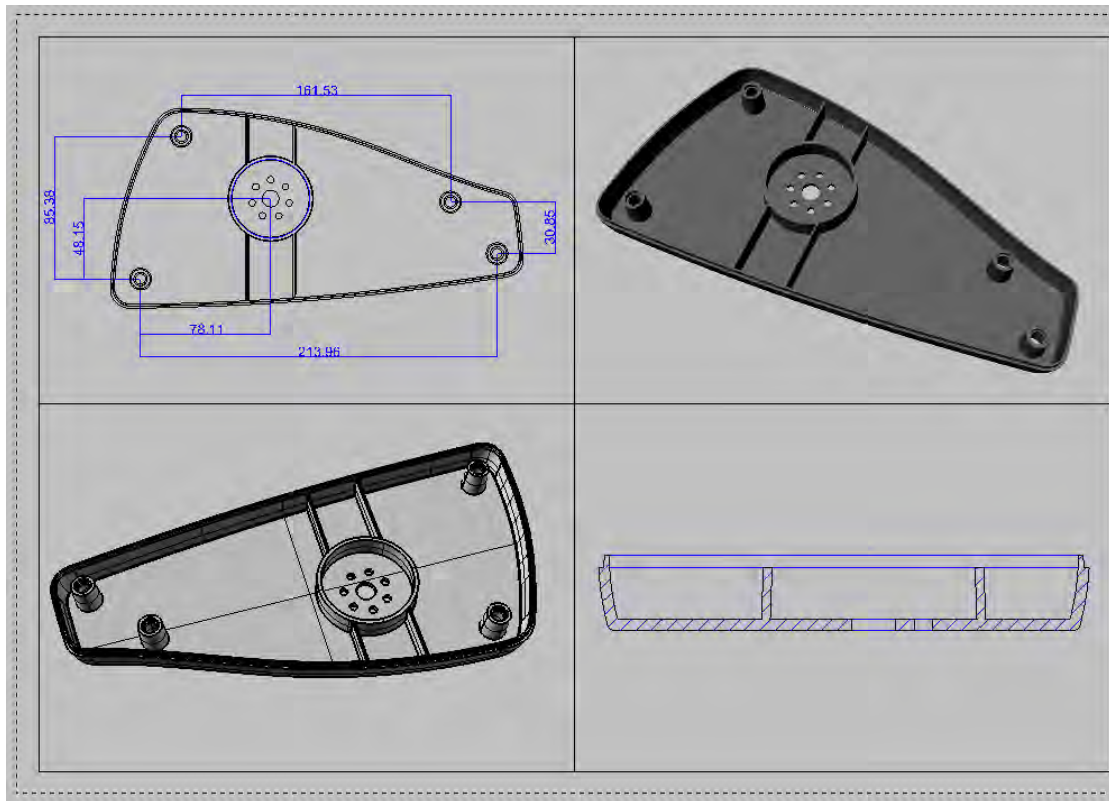
Joining Surfaces

Checking for Watertight Joins
Filletting and Blending
Variable Filletting/Blending Strategies
What to do When Fillets Fail
How to avoid difficult surfaces (eg five sides)

Developing the Model

Shelling Strategies
Adding Lip, Rib and Boss Detailing
Adding styling details





Strategies for 'Organic' Forms

Examine various strategies for creating organic forms and how there is always more than one tool to create the surface you have in mind.

UDT Tools

Flow Along Surface - Deforming flat objects accurately
 Cage Editing
 Taper, Twist and Stretch

Managing Large Projects

Block Instances
 Layer Options
 Worksessions Discussed
 Named Views

Rendering with V-Ray

An introduction to the high-end renderer V-Ray for Rhino.