# Level 1 – Rhinoceros for Mac - Online

## Course Outline

In this comprehensive class of **seven - three hour online sessions**, you'll learn to create and edit accurate free-form 3-D NURBS models.

This fast-moving class covers most of Rhino's functionality, including the most advanced surfacing and solid modeling commands. This class will cover the basic Rhino modeling techniques that are required to create Rhino 3-D models for any industry.

### Structure

In this class, you will systematically move through the user interface, command access, creation and editing curves, surfaces and solids.

## Expected Outcomes

After this course the student is expected to be able to:

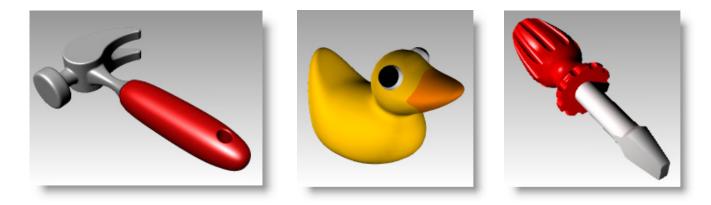
- ( Utilize the features of the Rhino user interface
- ( Customize your modeling environment
- ( Create basic graphic objects-lines, circles, arcs, curves, solids, and surfaces
- ( Model with precision using coordinate input, object snaps, and SmartTrack<sup>™</sup> tools
- ( Modify curves and surfaces with edit commands and Gumball
- ( Use control point editing to modify curves and surfaces
- ( Analyze your model
- ( Display any portion of the model
- ( Export and import models to and from different file formats
- ( Shade the model
- ( Make2D
- ( Dimension and annotate model with text and hatch
- Render a Model with the Rhino/Toucan Render

#### **Target Audience**

This course is for the design professional who wants to efficiently learn the concepts and features of the **Rhinoceros for Mac** modeling software at an accelerated pace in an instructor-lead environment.

#### Prerequisites

- Mac OS skills and an aspiration to model are desired.
- Previous design and modeling experience helpful but not required.
- A Mac computer running a supported OS
- Rhinoceros for the Mac beta or release software installed and running.



Session 1	Торіс
9-10:30AM	Introductions & Orientation
10:30-10:40 AM	Break
10:40AM-12:00PM	Creating geometry
Session 2	Торіс
9-10:30AM	Creating geometry
10:30-10:40 AM	Break
10:40AM-12:00PM	Creating geometry
Session 3	Торіс
9-10:30AM	Editing
10:30-10:40 AM	Break
10:40AM-12:00PM	Editing
Session 4	Торіс
9-10:30AM	Control point editing
10.20 10.40 444	
10:30-10:40 AM	Break
10:30-10:40 AM	Break Modeling with Solids
10:40AM-12:00PM	Modeling with Solids
10:40AM-12:00PM Session 5	Modeling with Solids
10:40AM-12:00PM Session 5 9-10:30AM	Modeling with Solids Topic Surfacing
10:40AM-12:00PM Session 5 9-10:30AM 10:30-10:40 AM	Modeling with Solids Topic Surfacing Break
10:40AM-12:00PM <b>Session 5</b> 9-10:30AM 10:30-10:40 AM 10:40AM-12:00PM	Modeling with Solids Topic Surfacing Break Surfacing/ Rendering
10:40AM-12:00PM Session 5 9-10:30AM 10:30-10:40 AM 10:40AM-12:00PM Session 6	Modeling with Solids Topic Surfacing Break Surfacing/ Rendering Topic
10:40AM-12:00PM Session 5 9-10:30AM 10:30-10:40 AM 10:40AM-12:00PM Session 6 9-10:30AM	Modeling with Solids  Topic Surfacing Break Surfacing/ Rendering  Topic Modeling practice, Rendering
10:40AM-12:00PM Session 5 9-10:30AM 10:30-10:40 AM 10:40AM-12:00PM Session 6 9-10:30AM 10:30-10:40 AM	Modeling with Solids  Fopic Surfacing Break Surfacing/ Rendering Modeling practice, Rendering Break
10:40AM-12:00PM Session 5 9-10:30AM 10:30-10:40 AM 10:40AM-12:00PM 9-10:30AM 10:30-10:40 AM 10:40AM-12:00PM	Modeling with Solids  Topic Surfacing Break Surfacing/ Rendering Modeling practice, Rendering Break Import/export, Rendering
10:40AM-12:00PM Session 5 9-10:30AM 10:30-10:40 AM 10:40AM-12:00PM 10:30-AM 10:40AM-12:00PM Session 7	Modeling with Solids Fopic Surfacing Break Surfacing/ Rendering Modeling practice, Rendering Break Import/export, Rendering

\*\* We will stick to the schedule as close as possible. Instructor will modify as the class progress in a manner that may be more suitable for group.