



AREA MULTIDISCIPLINAR

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| ASIGNATURA / SUBJECT | WORKSHOP – DIGITAL FABRICATION WITH RHINO |
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| DOCENTE / TEACHER | Rodrigo Bárcena Affonso Orciuoli |
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| CURSO / COURSE | - |
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| HORARIOS / TIME SCHEDULE | FEBRUARY 2012 - 3 Days X 4 hours |
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OBJETIVO GENERAL / GENERAL OBJECTIVE

Optimizing Rhino models to output real models.

Troubleshooting problems in existing files and fairing the workflow in new projects.

CONTENIDOS / CONTENTS

Day one:

Why using Digital Fabrication technologies? Where are we?

Rhino Basics: Nurbs topology and edge management.

Interface and display.

Improving teamwork workflow: communicate your project and ideas.

Day two:

Shelling /Offsetting surfaces.

Unrolling /developing surfaces.

Sectioning and section management.

Dealing with naked edges and bad objects.

Day three:

Rhino Nest: creating layouts.

Exporting results: DXF, DWG, STL.

Printing selected projects.

METODOLOGÍA / METODOLOGY

Classes will be held in Spanish / English.

Lectures will be held using sample models, while students will put in practice on their own models the concepts and ideas demonstrated.

Output: Ready-to-print 3Dfiles and 2D patterns to be cut.

PRESENTACION FINAL / FINAL PRESENTATION

Printed prototypes 1:1 or 1:5, depending on the size of the project and hardware availability.

Project dossier highlighting potential problems and solutions.

MATERIAL NECESARIO / MATERIAL NECESSITIES

- Computer with Rhino 5 license, provided by the school or by the student.
- Existing Rhino 4 or 5 project, at any level of completion, to be completed and prepared during the course.

BIBLIOGRAFÍA / BIBLIOGRAPHY

Recommended articles:

- <http://en.wikipedia.org/wiki/Nurbs>
- http://en.wikipedia.org/wiki/3d_printing
- <http://wiki.mcneel.com/rhino/faqclosedsolids>
- <http://wiki.mcneel.com/de/rhino/meshfaq>