IED AREA MULTIDISCIPLINAR

ASIGNATURA / SUBJECT	WORKSHOP – GRASSHOPPER 101

DOCENTE / TEACHER	Oriol Carrasco + Alba Armengol // Affonso Orciuoli www.smdarq.net

CURSO / COURSE	3º Area Desing

HORARIOS / TIME SCHEDULE	12/13/14 FEBRUARY 2013 – 12h: 3 Days x 4 hours

OBJETIVO GENERAL / GENERAL OBJECTIVE

We will be able to understand Grasshopper logics and how the algorithmic design process can intoxicate our way of thinking about design of objects and spaces. Grasshopper will be used as the main tool for designing but having in mind that we need to export some results.

CONTENIDOS / CONTENTS

Classes will be held in Spanish / English.

Input:
Case studies of existing spaces and objects created by algorithms and final objectives of parametric design. Design driven by Parametrics and its applications in real world.

Process:
We will use Grasshopper as the main tool for design a stand. Due the small restrictions of the assignment, we would be able to approach to Grasshopper workflow while we try to map ideas as algorithms.

The sessions would be totally practical, trying to create a dialogue between the ideas we can have and the constraints that the tool can produce.

Output:
Exhibition of prototypes (by hand or laser cutted if possible), renders and 3D views of the elements.

METODOLOGÍA / METODOLOGY

Day one:

Former introduction to Grasshopper and case studies in parametric design, Rhino vs Grasshopper or how we can link Rhino with Grasshopper and vice versa. Maths to generate geometry and what are lists, and lists of lists. First exercises about surfacing.

Day two:

Differences in naming and labelling between RH and GH, what brep does mean. Surfaces driven by parameters, and modifiers driven by attractor points.

Day three:

Grasshopper Outputs, how to slice and create waffles for future laser cutting and construction virtual objects.

PRESENTACION FINAL / FINAL PRESENTATION

- Cardboard Models
- Renders
- Sketches

MATERIAL NECESARIO / MATERIAL NECESSITIES

- IED PC Aulas with Rhino 5.0 + Grasshopper 0.9.0.14
- (OR) Students Computers PC Rhino 5.0 + Grasshopper 0.9.0.14

BIBLIOGRAFÍA / BIBLIOGRAPHY

Grasshopper Blog: http://www.grasshopper3d.com/
Grasshopper Manual: http://www.liftarchitects.com/downloads/

Grasshopper Video Introduction: https://vimeo.com/28175502
                        Vimeo.com, search for David Rutten grasshopper webinar