Computational Design

When professors at schools and design companies worldwide had to immediately transition to remote learning this past spring, numerous professors, students, and work-at-home employees reached out to us. They have been trying to learn how to use Rhino's computational design features to enhance their modeling process. While some had a moderate understanding of our tools, most were looking for materials to learn or extend their current knowledge.

If you are looking to acquire skills in Grasshopper, we would like you to join our new learning platform and take our Computational Design with Grasshopper class. This course is for design professionals looking to learn the concepts and features of Grasshopper that are easy to follow at your own pace. The Computational Design course is 100% free for **faculty members or students**, the price for commercial users is 49.95 $USD.

The purpose of this course is to explore forms and design possibilities with Grasshopper's tools and understand their relationship to Rhino. The class should help you improve your workflow by covering modeling geometry, data structure, general concepts, data types, data matching, lists, trees and of course, tons of creativity. It will provide you with a functional understanding of Grasshopper and parametric design thinking. The advantages of using Grasshopper in preliminary design and concept development come to life in numerous real-life examples throughout the course.

The class is intended for beginners in Grasshopper and Computational Design, but basic knowledge of Rhino is required.

We offer these Rhino introductory courses free of charge to introduce you to the world of Rhino in English and Spanish. Here are the direct links to these two courses: Intro to Rhino in English and Introduction to Rhino in Spanish.

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The chart below serves as a suggestion for faculty members, **ART**s or independent teachers that may want to follow this timeframe with their students. The idea is to be able to cover all the material within **two months**, spending from 2 to 4 hours at most each week.

A bit more about the timeframe:
Each chapter has more or less twelve lessons, one to five quizzes, demos, exercises, and once in a while, a homework assignment. Below is a realistic layout of the number of hours and weeks a student could invest in this workshop at their own pace.

Time Frame

Week #	Chapters:	Hours:	Coaching?
1	2) Win or Mac, 3) Interface, 4) Intro to Params, and 5) Lists	4 +/-	***
2	6) Curves and 7) Math	~ 3	
3	8) Sets	< 3	
4	9) Vectors and 10) Surfaces	~ 3	
5	11) Transform	4 +/-	
6	12) Trees	~ 3	
7	13) Intersections	4 +/-	
8	14) Bonus Pack, if you have the extra time	~ 3	

The teacher or student will be able to download all the material for the corresponding lesson right before they start.

Download

Computational Design with Grasshopper

The material may be in the form of 3DM-files, Grasshopper Definitions, bitmaps or text files. Everyone should download this material and compare it with the code that they write. These are very small files and 100% compatible with Rhino 6 and 7.
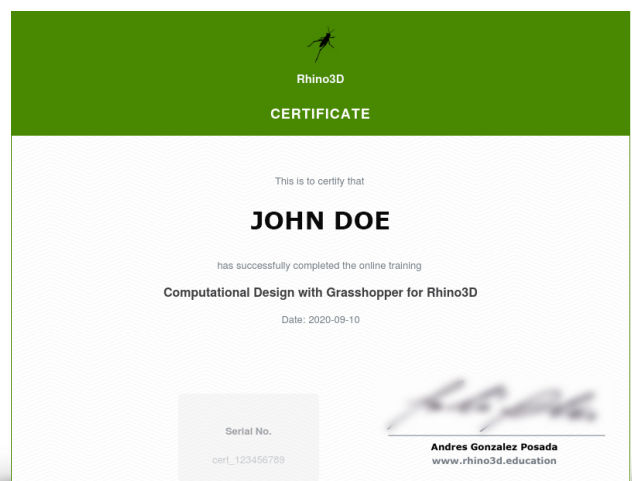
Many learners are afraid of taking quizzes, tests and questionaries. But in our course, we are using this tool as a reinforcement to repeat and practice the same concept over and over until you master the basic and fundamental workflows. The quizzes are all multiple choice and if you choose the wrong answer, don't panic! We will reveal the right answer to promote learning.
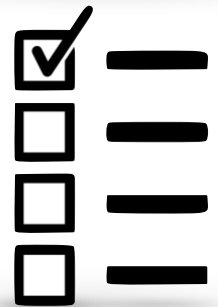
At the end of each chapter, the user will have a chance to write and communicate any doubts about a specific lesson, parameter or component with our team. They can even request to share a few pictures of their progress if they like!
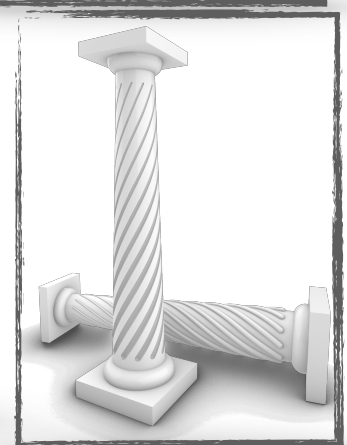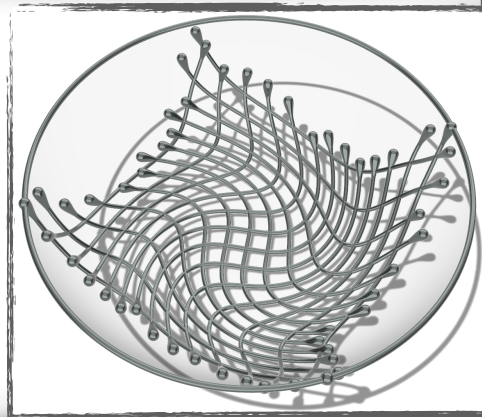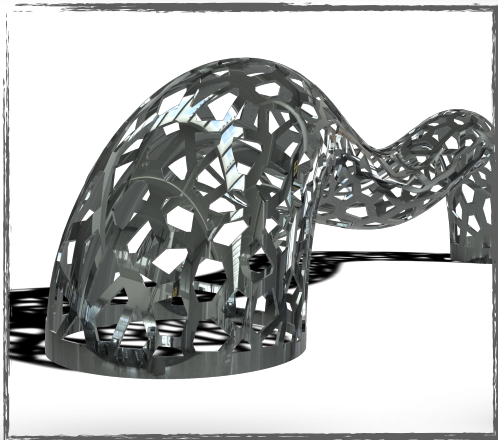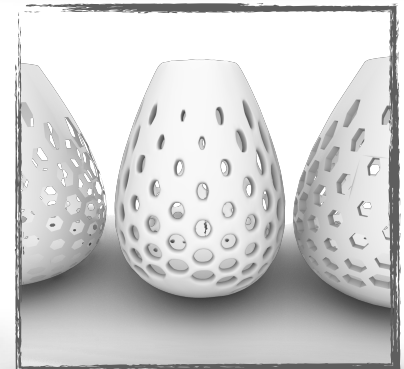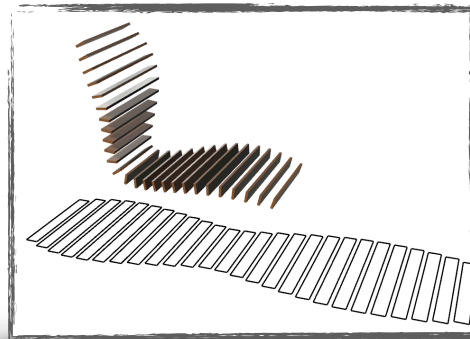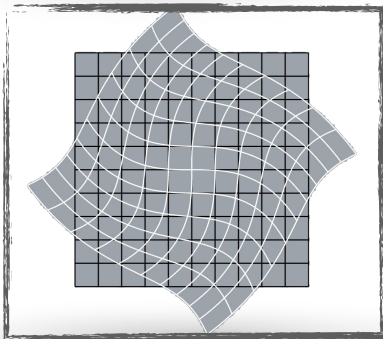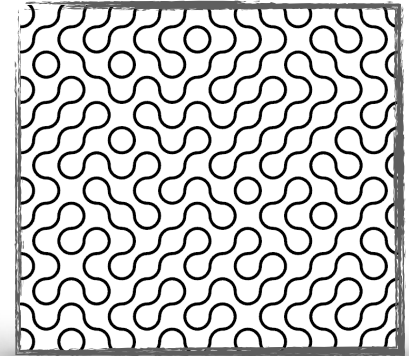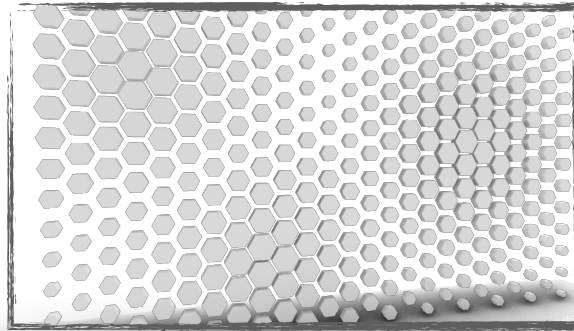
Every student has to take the material in this course in order. In other words, the users may not skip one lesson or a whole chapter in order to finish the course. More than 90% of each video has to be watched in order to continue to the next lesson. If a student completes all the materials in this course, they will receive a certificate of completion from McNeel, and this proof of completion can be used by the instructor to give some extra credit to the student.

Rhino3D

CERTIFICATE

This is to certify that

JOHN DOE

has successfully completed the online training

Computational Design with Grasshopper for Rhino3D

Date: 2020-09-10

Serial No.

cert_123456789

Andres Gonzalez Posada
www.rhino3d.education

Few samples of the projects students will be able to create upon completion of this course:

*** Coaching

Take advantage of this new service that we provide as a complement to this course. If you plan to teach this course and feels you need extra help with one hour each week to help your students, we can provide an **8-Hour-Coach-Plan** if you need it. Please contact jackie@mcneel.com for more detail.

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Few videos showing off some of the exercises we will be working on, few more at VIMEO

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