ACCF IDCD 390 COMPUTER AIDED DESIGN - 3D RENDERING (RHINO)

Program	Three-year course in Design
Course	3D Rendering (Rhino)
Credits	3
Professor	Paolo Calimici

Course Description	Course Content: The course will focus on the introduction to 3D modeling using Rhinoceros 3D software. Students will be supervised in the making and managing of 3D models starting from 2D geometries, sketches and pictures of everyday objects and furniture products. Aims and objectives of the course: First, the students will learn the Rhino basic tools that will help them model simple objects. Second, they will learn to make and manage 3D models with the most frequently used Rhino commands.
Learning Objectives and Outcomes	Upon completion of this course, students will be able to: - use the main commands of Rhino; - make basic geometries including curves, surfaces and solids; - understand the concepts of 3D modeling; - make 3D models starting from sketches and 2D geometries; - define and manage the properties of the models.
Student Assessment	The evaluation will be based on students' ability to learn the main concepts of 3D modeling as well as their ability to make simple 3D objects by using the main commands of Rhino. After each task, the instructor will evaluate the student's output. At the end of the term, a final exam will take place. Final student assessment will be greatly influenced by: INVOLVEMENT, ATTENDANCE, UNDERSTANDING, WORK AUTONOMY.
Bibliography, Webography, Filmography	Rhinoceros website : https://www.rhino3d.com/ User's Guide Rhino for Windows: http://docs.mcneel.com/rhino/6/usersguide/en-us/index.htm User's Guide Rhino for Mac: http://docs.mcneel.com/rhino/6mac/usersguide/en-us/index.htm Online Help for Windows: http://docs.mcneel.com/rhino/6/help/en-us/index.htm Online Help for Mac: http://docs.mcneel.com/rhino/6mac/help/en-us/index.htm

Week 1	Basic GUI- Command string, drop-down menu and Fly-out, changing and maximizing views, Zoom, Pan, Rotate View,Ortho,Osnap,Gumball. Introduction to the basic tools of Rhino – Standard toolbar – Curve tools. Introduction to surfaces and solids – Surface tools – Solid tools.
Week 2	Model of a chair – 2D profiles drawings, creating surfaces and solids (most used tools: Line, Circle, Offset, Trim, Join, ExtrudeCrv) - (demonstrated by Professor)

Week 3	Model of a chair - assignment
Week 4	Model of a simple desk - assignment
Week 5	Model of a glass - (most used tools: Line, Circle, Offset, Trim, Join, Fillet, Revolve) - demonstrated by professor
Week 6	Model of a glass - assignment
Week 7	Review of students' work
Week 8	Model of a tubular chair - (most used tools: Line, Offset, Trim, Join, Fillet, Pipe) - demonstrated by professor
Week 9	Model of a tubular desk - assignment
Week 10	Model of a set of vases - (most used tools: Line, Circle, Trim, Join, Loft, Cap, Shell) - demonstrated by professor + assignment
Week 11	Model of a table lamp - (most used tools: Line, Offset, Trim, Join, Fillet, Pipe, Extrudecrv) - demonstrated by professor
Week 12	Model of a table lamp - assignment
Week 13	Review of students' work
Week 14	Final exam