

3D Digital Sculpture and Experimental Virtual Environments

Fall 2015

Pre-requisite: NA

Instructor: Carmen Tiffany

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Art and Art History Department

Office: Art Studio 110

Hours: By appointment only.

Course Description

An introduction to the basic practices of 3D digital sculpture and new media with emphasis on fundamental strategies for making experiments in digital modeling, 3D printing and assemblage of mixed media. Creating sculptures in an Experimental 3D environment does share some spatial and design qualities with that of the physical world but also has others that are totally unique to it, among them the lack of gravity and the ability to deform in fluid and organic ways. By using digital imaging tools students translate the idea of a free-standing sculpture from the real, meaning from physical space to 3d and 4d virtual environments. In the virtual realm, sculpture can become a mutable form and therefore, an expression both of time and of space. This is a class that investigates the possibilities of intuitive artistic creation in a rational computer/artificial system. Potential output solutions include video installation and 3d rapid prototype plastic prints.

Students will be exposed to innovative work and will be required to read relevant readings. Class critiques address technical, conceptual, aesthetic and poetic concerns. This "Hands On" studio course is an introduction to the world of 3D digital media. We will discuss the cultural implications of this medium and develop the technical skills to explore it ourselves.

Course Objectives

- *Produce conceptually interesting and formally compelling artwork.
- *Understand the principles of 3D computer modeling and sculpture.
- * Accept learning and creativity as your primary asset.
- *Relate traditional sculpture principles of form, material and site and utilize 3D modeling to virtually give rise to an installation or sculpture
- *Offer intelligent and informed critiques. Develop original ideas and concepts.
- *Develop an awareness of artist working in the field.
- *Explain the purpose and significance of the chosen topic
- *Understand the social, conceptual, and aesthetic concerns of digital sculpture for the creation of personal art making
- *Recognize characteristics, trends, and developments in new media.
- *Develop a heightened sense of individual, social and cultural awareness.

Learning Outcomes

Acquire the critical thinking skills needed for exploring technology as a means of artistic expression. Apply the symbolic and imagery constructs of 3D design to their own video definition of art. Build and extend basic skills in editing and image manipulation using more advanced digital programs. Explore exhibition possibilities, traditional screening, gallery installation, or web-based projects.

A secondary goal will be to learn techniques of rapid prototyping of your 3D forms and to learn about artists who are creating and pushing the boundaries of how to utilize 3D software in a fine arts context.

Requirements:

-General knowledge and ability to navigate computer's operating system.

-Maya, Mudbox, Makerbot Replicator 3D Printing, 2D Laser Cutting, 3D Scanning (also Photoshop and Illustrator may be introduced for certain files and project specific goals)

Procedures

*This course will focus on conceptualization and research as a driving force for realization of 3D modeled environments, installations, objects, sculpture and characters in the virtual spaces of the computer.

*Pencil sketches will serve as guides to translating designs into 3D and all will be used for visualization, reification and further research for final output. Our focus will be on appropriate techniques for using and thinking about 3D software in preparation for constructing environments, objects and for animation studies and this course explore outputting 3D models and physicalizing our virtual forms.

*Various file formats will permit access to rapid prototyping systems including the 2D laser cutter and Makerbot Replicators.

*The primary goal of this course will be for you to understand the concepts and practice of utilizing 3D software as a tool of ideation, workflow production and for testing and visualizing conceptually driven works of art and invention.

Bibliography and Referential Readings:

**Internet Essays and Blogs discussing virtual worlds and conceptualism and the relevance of digital sculpture and 4D interventions

****An Aesthesis of Networks: Conjunctive Experience in Art and Technology** (Technologies of Lived Abstraction) by Anna Munster (May 17, 2013)

****Digital Art** (World of Art), Christiane Paul, 2008

****A History of Visual Culture: Western Civilization from the 18th to the 21st Century** by Jane Kromm and Susan Benforado Bakewell (Feb 2, 2010)

****Visual Culture** by Richard Howells and Joaquim Negreiros (Feb 6, 2012)

****A General Theory of Visual Culture** by Whitney Davis (Feb 7, 2011)

****ABC's of Bauhaus, The Bauhaus and Design Theory** Ellen Lupton (Jun 15, 2000)

****Bauhaus** by Jeannine Fiedler and Peter Feierabend (Jun 15, 2013)

****Bauhaus Culture: From Weimar To The Cold War** by Kathleen James-Chakraborty (Jul 18, 2006)

****AFTERSHOCK : The Legacy of the Readymade in Post-War and Contemporary American Art** by Francis M. and Thomas Girst Naumann (2003)

Standards for Grading

Your performance and assignments will be graded upon evaluation in regards to the following questions:

- Does your work reflect significant studio time and evidence of labor?
- Are your assignments evident of the energy necessary to produce your best work?
- Did you work at the highest level of maturity, discipline and motivation?
- Did you complete all parts of your assignments by the due dates?
- Does your work show that you have fully comprehended and incorporated the material covered in class?
- Did you fully participate in class activities?
- Have you missed enough classes to affect your grade?

Your goals in this class: (Criteria on which you will be judged)

* Challenge yourself and work hard. Set your expectations high. If you do not challenge your ability to create work you will weaken potential for finished work. There is nothing negative about working hard and reaching personal goals. Participate in online dialogue with the instructor and classmates about your

assignments. This will enable you to acquire and articulate critical reasoning in regards to your own work and your peers work.

* Think outside of what is given to you. You will be given assignments with parameters in order achieve technical goals and have a basic understanding of conceptual reasoning. Do not think of these parameters as inhibitors. In the grand scheme of things the parameters are small and can potentially give much creative freedom if students push themselves to do so.

*Students will be allotted access to our Digital Hub if they are enrolled in this course

Digital Hub Hours:

Monday-Friday 9am-5pm

YOU WILL BE REQUIRED TO ACCESS THE LAB OUTSIDE OF CLASS HOURS. If you cannot commit to working in the lab outside of class for access to equipment and troubleshooting you should drop this class now.

The lab manager in Tony Lugo. He is here to help you with technical aspects of this class and assist the digital department in other ways. Please treat him with respect and make an appointment with him for certain projects if you will need his assistance for more than a 10 minute time frame. Make appointments for techniques like green screen or anything to do with camera operation.

THERE IS NO FOOD OR DRINK ALLOWED IN THE DIGITAL LAB EVER!!!!

Grading

Final Grade Scale:

A	94-100%	C+	77-79%
A-	90-93%	C	73-76%
B+	87-89%	C-	70-72%
B	83-86%	D	60-69%
B-	80-83%	F	0-59%

Late assignments will not be accepted. Occasionally exceptions can be made. However this is case by case and it completely up to the professor as to whether the late work will be accepted. Communication is key.

Attendance

YOU ARE REQUIRED TO COME TO EVERY CLASS!!!!

You will be allotted two absences throughout this course. Every unexcused after these two will lower you final grade by one letter grade. An excused absence must accompany physical documentation from a doctor or a family emergency.

**Your allotted absences are for sick days that you do not go to the doctor, car breaking down/accident and other such emergencies. You will NOT be excused for days that you are at home with sniffles, these count as your allotted three absences. AGAIN I REPEAT if you use your three absences, a fourth unexcused will lower your final grade by 10% (one letter grade)

Late: I do not mark down if you are "late" because it is a waste of my time. If you are repeatedly coming in late for class I will just mark you absent eventually and just ask you to leave. Just be on time, very simple.

Blackboard

All course content such as assignments, readings and grades will be posted in Blackboard. If you do not have access to Blackboard you need to seek out technical support immediately. You will not be able to complete this course without Blackboard

Email

I will send out notices about a schedule change, running late and other announcement in your University email. Please periodically check your email.

Critiques

You are required to attend and participate in scheduled class critiques. This is part of your grade for every project. Missing critique is the equivalent of not turning in the assignment at all. You will not receive credit for the project if you are absent during critiques, unless you have otherwise worked something out with me before the scheduled critique day.

Phone Use In Classroom

While we are working in class you are allowed to use your phone as you wish within reason. However when we are having a class discussion, I am lecturing or we are engaged in class critique you will not be on your phone. You will be asked to leave and will be marked absent.

Digital Hub Equipment Check Out Policy

Students enrolled in Digital Art Courses in AS115 are eligible for equipment checkout. Equipment may be checked out for a period of 48 hours. If equipment is turned in late it will be noted on a student's file. After two strikes of turning in equipment late, students will lose equipment check out privileges. The Digital Hub has the right to refuse any student equipment checkout privileges.

A faculty member has to sign this form before a student can check out equipment. Faculty must also fill out below form to be eligible to check out equipment, however they can sign off for themselves.

General Rules and Best Practices For All:

- Allow yourself 15 minutes for proper check out and check in of equipment.
- It is your responsibility to check equipment prior to leaving the cage. This includes checking for accessories. Everything should be noted on your checkout form.
- You are responsible for every piece of equipment checked out in your name and you should be the ONLY person to use, operate, and return that gear.
- Handle all equipment with the utmost care. Do not operate equipment in extreme temperatures and keep electronics away from liquids.
- If you are unsure how to operate a piece of equipment, ask for help from your instructor and/or Tony Lugo. Do not attempt to force anything!
- You will be responsible for replacing any lost or damaged equipment and/or accessories.
- Never leave equipment sitting for long periods in an unattended car (even the trunk).
- Always inform the cage manager of the locations you are planning to use the equipment.
- DO NOT shoot in equipment-threatening settings (beaches are among the worst).
- DO NOT attempt to repair the equipment if it breaks or malfunctions while under your care.
- No back-to-back reservations or checkouts on high demand equipment.

- Return equipment in the same condition you received it. Neatly coil cables and cords and place all items in their proper cases.
- Immediately contact the Digital Hub, if there are any problems with your equipment.

***Signing this form indicates that the student clearly understands they will assume all financial responsibility for lost, stolen or damaged equipment. If the equipment is not replaced within 30 days of incident the student will be fined for the amount they are responsible for and will be put on an academic hold.**

Checkout Begins Monday August 24th 2015
Checkout Ends Monday December 7th 2015

All equipment checkout will be through Tony Lugo, Digital Hub Manager.
Email: lugor@fiu.edu

Digital Hub Checkout Hours: 10am-4pm Monday through Friday