S13-Installation

Spring 2013 - Installation Using Digital Processes

Course Description

Credits: 3; Prereq: DIG 4527C and ART 3959C

[from the university course listing]

Students explore site specificity and intervention in 3D space through installation, using digital media to understand concepts such as sequence, narration, scoring, interactivity, motion, and recursion.

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art4848c - Undergrad  
art6849c - Graduate  
Class: FAC 306  
Time: T/Th 8:30-11:30  
Course Website: http://digitalmedia.arts.ufl.edu/~jack/wiki/S13-Installation  
Course Listserv: spring-3068-l@lists.ufl.edu

Introduction

The goal of this course is to develop the students understanding of installation as a medium. We will contextualize installation with respect to other forms of aesthetic experience and identify distinct categories of behavior that define various approaches to the medium. Not only will we learn about historic and contemporary installation, but we will look ahead to ways in which installation informs and is modified by developments
in technology. We will investigate ways that digital processes can be used to enhance practice as well as means with which digital processes might become a core component of the work. Finally, we will survey various tools and methodologies that might be used in the production of installation art. **Course content is adapted to the skills of the artist/s, so your primary task is to challenge your own abilities and push the boundaries of your current knowledge.**

Things you might learn/explore:

1. Site-specific intervention
2. Create environments that respond, dynamically to the participant
3. Tactical media works
4. Multi-channel, synchronized video installation
5. Telematic works that combine physical and virtual media
6. Tangible media installations
7. Generative experiences
8. Participatory works that collect data
9. Surveillance
10. and more....

Tools you might use to enable the list above:

1. Cycling '74s Max/MSP/Jitter [or PD = open source variant]
2. Game Engines: Unreal, Unity3d, Torque
3. Programming: Processing, Java, C#, etc.
4. Streaming: Wowza Media Server, QuickTime Streaming Server
5. Multi-player game server: Smart Fox Server
6. Form [static and dynamically driven]: Maya, Rhino, Blender
7. Rapid Prototyping/manufacturing, Industrial Design: The FabLab
8. Microcontrollers and Sensors: Arduino, Kinect, webcams, touch, RFID, etc.
9. Network/Database: Apache, php, MySQL, etc.

**Objectives**

1. Become aware of the history and foundation of installation.
2. Develop an ability to analyze and evaluate works from an informed point-of-view.
3. Gain an awareness of related work in the field.
4. Learn to engage in meaningful discussion and develop a sense of criticality.
5. Develop a level of comfort with the integration of digital processes were appropriate.
6. Learn to propose and present ideas in a way that clearly demonstrates intent.
7. Have FUN!

Grading

Grades will be based 90% on class assignments and 10% on class participation. You are expected to constructively criticize your peers. Constructive criticism is considered a part of your class participation.

Minus Grades were instituted on campus during Summer A 2009. For more information: [1]

Specific info on grades and grading can be found at: http://www.registrar.ufl.edu/catalog/policies/regulationgrades.html.

Notwithstanding the description of grades above, generally, grades are conceived in this way:

A(Excellent) Student’s work is of exceptional quality and the solutions to problems show a depth of understanding of the program requirements. Project is fully developed and presented well both orally and graphically. Student has developed a strong and appropriate concept that clearly enhances the overall solution. The full potential of the problem has been realized and demonstrated.

B(Good) Student’s work shows above average understanding and clear potential. All program requirements are fulfilled and clearly and concisely presented.

C(Fair) Student’s work meets minimum objectives of course and solves major problem requirements. Work shows normal understanding and effort. Quality of project as well as the development of knowledge and skills is average.

D(Poor) Student’s work shows limited understanding and/or effort. Minimum problem requirements have not been met. Quality of project or performance as well as development of knowledge and skills is below average.
F(Failure) Student’s work is unresolved, incomplete and/or unclear. Minimum course objectives or project requirements are not met, and student’s work shows lack of understanding and/or effort. Quality of project or performance is not acceptable.

Instructor’s evaluation of student’s interest, motivation, attendance, proficiency and overall development or improvement during the semester will be taken into consideration in determining the final course grade. This syllabus is subject to refinement and development throughout the semester based on feedback and class interaction. Policies and grading criteria are absolute and will not change. Any substantial changes will be discussed with the class prior to implementation.

Grading breakdown:

- Artist/Installation Presentation = 20%
- Proposal = 20%
- Preliminary Reviews = 20%
- Installation = 20%
- Essays: Total = 10%
- Class Participation = 10%

Attendance

1. Attendance is required. You are required to work/participate the duration of the scheduled class period.

2. You are permitted a maximum of 3 unexcused absences before your grade is reduced 1 letter grade/per absence.

3. Be on time for class. Three tardies equals 1 unexcused absence.

4. If an absence occurs it is the student’s responsibility to make up all work.

5. All assignments are due at the beginning of class.

6. No late assignments will be accepted.

Reading

Readings will consist of .pdfs and URLs available on the class website. The book is out

Also, recommended reading if you plan to create interactive installations that require electronic media: "Making Things Talk", Tom Igoe, 2007, O'Reilly, Cambridge ISBN 978-0596510510

Materials

Required materials will depend on the proposed projects submitted by students. Students will design projects and set budgets based on the goals of the work.

Be Sure To Read the Policies and Disclaimers

They are linked at the bottom of each and every page ----- see below
Project Descriptions

Essays

For every reading assignment you will write an essay that addresses the fundamental components of the article and demonstrates a basic knowledge of the key points. Include critical analysis of the content where appropriate. The essay should be posted on the class wiki prior to the beginning of class on the day the reading is due. You may refer to this written text during class discussion.

Artist/Installation Presentation

Choose a significant artist involved with installation work. Research the artists work and life. Prepare an in-depth presentation of their work from a conceptual and technical point of view. Discuss the historical context of the work, illustrating influences and/or similarities with other work. Discuss the ideas behind the work and compare/contrast these with the work of others. Identify where you think the work fits within the categories of installation we’ve identified in class. If it fits none, describe how you propose the work functions from the viewers perspective. Discuss the theoretical foundation of the work. Multimedia samples of work are encouraged. This is not a PowerPoint "quickie" book report! It should be a well researched, thoughtfully considered, and provoking investigation into the life and work of someone whose work matters to you. Tell us why this artist is significant and how you are influenced. By the same token, this is not a cheerleading or promotional activity either. Critically analyze the work for conceptual, experiential, cultural, and other deficiencies. How would you improve the work? This is not intended as a survey of an artist’s entire catalog. Focus on a single project, perhaps mentioning a few others if they were significant in the development of the primary work. The presentation should last a minimum of 30 minutes. There is no upper limit as long as the length is appropriate to the content. Turn in the presentation and a complete bibliography on CD or DVD. Link your presentation to the class website so your classmates, and future students can benefit from your work. You will be evaluated based on the content, the incisive nature of your analysis, and the quality of your presentation.
Proposal

Prepare and present a complete proposal for the creation of an installation. The proposal should discuss the form, content, and methods associated with the work. It should include a complete budget and timeline. If the proposal is for a group project, team member responsibilities must be fully described. Include a section with all preliminary research that has been completed. Provide sketches, models and animatics (if required) of the work and the environment. Outline all required hardware and software and how you plan to acquire the needed resources. Identify the location of the installation. Prepare the proposal as if it is to be submitted to someone who knows nothing of the project or your qualifications as an artist. The proposal may take the form of a website. It may also include a video "trailer" or some other form that communicates your intention. You will be evaluated based on the complete disclosure of your intent as well as the strength of your concept. I expect that over the course of the semester the project will develop in such a way that the proposal may need to be updated to reflect significant changes. It is your (or your teams) responsibility to keep this current. While we will be discussing microcontrollers, sensors, computer vision, and other technologies during the course of the semester, you are not required to use these in your work. You should use digital processes where they support and enhance the concept. There are many ways that digital processes can impact work without complex interfaces, etc.

Preliminary Review

Following your proposal, and at a significant intermediate point in project development, you will undergo a preliminary review. Your progress will be measured against your stated intentions and a more rigorous analysis of your concept and its likely implementation will result. This review will allow you to make improvements in the work as a result of viewer feedback, thereby strengthening the final work. Depending on the structure of your work, you will install or simulate the final product so we can experience it as intended. You will also present your research to date and provide an updated wiki documenting work to date.

Installation

Your primary goal this semester is to create an installation. The success of this work is a major portion of your grade. You will be working towards this the entire semester. You or your team are responsible for all aspects of its conception, construction, implementa-
tion and exhibition. If you choose to work as a team, choose carefully! I am sensitive to group projects with "uneven" contributions by members. Grades will be given on an individual basis. If you do not "pull your weight" you will be penalized! As is always the case, the end result will be evaluated based on its merits as a work of art. Technical difficulty does not supercede a weak concept or expression of that concept. I do expect you to experiment and push the boundaries of your knowledge/experience. You are free to build upon existing work as long as it is appropriate to this form and is a significant advance of the work. Beyond local exhibition of the work, submission and inclusion of the installation in a juried exhibition will be rewarded.
S13-Installation/outline

From stenner:teaching

Course Outline

- Unless otherwise specified, all readings are due on Tuesdays

Wk 1 : Jan 8, 10 Installation?

1. Intro - Syllabus
2. History
3. Forms of Installation
4. Assignment: (Due next week.)
   1. Reading:
   2. Get/install student version of Max/MSP/Jitter
   3. Prepare a list of 5 Installation Artists
   4. Brainstorm ideas for installation project.
   5. Start taking a look through the Max tutorials (via Help->Max Tutorials) -- you can skip MIDI parts

Wk 2 : Jan 15, 17 The Dream Scene, Heightened Perception

1. Discuss readings.
2. Discuss installation ideas.
3. Select Artist/Installation Presentations
5. Watch Bruce Nauman: Make Me Think (1997) documentary
6. Visualization Techniques
7. Max Exercises
8. Assignment: (Due next week.)
1. Reading:
   2. Chapter 4, Activated Spectatorship - Installation: A Critical History, Claire Bishop
2. Work through Jitter Tutorials
3. Develop Installation Proposal

Wk 3 : Jan 22, 24 Mimetic Engulfment, Activated Spectatorship

1. Discuss readings.
2. View documentary: Gary Hill I Believe It Is An Image
3. View Jennifer and Kevin McCoy work.
4. Refine/discuss installation ideas.
5. Jitter Exercises (For the 21st and 26th, bring interesting video and audio)
6. Assignment:
   1. Reading:
      1. One Place After Another: Notes on Site Specificity by Miwon Kwon
   2. Finalize Installation Proposal

Week 4 : Jan 29, 31 Installation Proposals

1. Discuss Readings
2. Brainstorming
3. Max/MSP/Jitter PLAY
4. Assignment: (Due next week.)
   1. Reading:
      2. Seven Ways of Misunderstanding Interactive Art - Erkki Huhtamo

Week 5 : Feb 5, 7 Survey of Digital Techniques

[Sensors and Microcontrollers]

2. Discuss readings (9th).
3. ADC and DAC
4. Arduino + Sensors Demo
5. Assignment:
   1. Installation Development
   2. Reading:
      1. Delusions of Dialogue: Control and Choice in Interactive Art - Jim Campbell

Week 6 : Feb 12, 14 Survey of Digital Techniques

[Sensors and Microcontrollers]

1. Discuss readings.
2. Sensor Demo
   1. Basic Arduino setup.
   2. Interfacing Arduino to Max/MSP.
   3. Controlling a video with a sensor.
3. Assignment:
   1. Installation Development
**Week 7 : Feb 19, 21 Survey of Digital Techniques**

[Computer Vision]

1. Discuss readings.
2. Video Tracking Demo
3. Artist/Installation Presentation 1 (21st)
4. Artist/Installation Presentation 2 (21st)
5. Assignment:
   1. Installation Development
   2. Reading:

**Week 8 : Feb 26, 28 Survey of Digital Techniques**

[Game Engines]

1. Discuss readings.
2. Artist/Installation Presentation 3 (26th)
3. Artist/Installation Presentation 4 (26th)
4. Assignment:
   1. Installation Development
   2. Reading: Sculpture in the Expanded Field by Rosalind Krauss, October v8 pp. 30-44.

**Week 9 : Mar 5, 7**

Spring PRODUCTIVITY - NO CLASS!

**Week 10 : Mar 12, 14 Critique Projects**

1. Discuss readings.
2. Artist/Installation Presentation 5 (12th)
3. Artist/Installation Presentation 6 (12th)
4. Demo A2 Fabrication and Research Lab
5. Review Project Development
6. Assignment:
   1. Installation Development
   2. Reading: Walter Benjamin: The Work of Art in the Age of Mechanical Reproduction

**Week 11 : Mar 19, 21 Project Development**

1. Discuss readings.
2. Artist/Installation Presentation 7 (19th)
3. Artist/Installation Presentation 8 (21st)
4. Review Development
5. Assignment:
   1. Installation Development
Week 12 : Mar 26, 28 Critique - General

1. Artist/Installation Presentation 10 (26th)
2. Artist/Installation Presentation 9 (28th)
3. Review Development
4. Assignment:
   1. Installation Development

Week 13 : Apr 2, 4 Work/Critique

1. Artist/Installation Presentation 11 (2nd)
2. Assignment:
   1. Installation Development

Week 14 : Apr 9, 11 Work/Critique

1. Artist/Installation Presentation 12 (9th)
2. Artist/Installation Presentation 13 (9th)
3. Assignment:
   1. Integrate/Finalize Project

Week 15 : Apr 16, 18 Work/Critique

1. (16th) - Crit
2. Artist/Installation Presentation 14 (16th)
3. Artist/Installation Presentation 15 (16th)
4. (18th) - Crit

Week 16 : Apr 23 Critique

1. (23rd) - Critique

Week 16 : April 30? Final Critiques

- TBD

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- This page was last modified on 31 December 2012, at 13:48.
S13-Installation/links

From stenner:teaching

Links

Installation

- Ilya Kabakov

- Perry Hoberman
- Jake and Dinos Chapman
- Anne Hamilton
- Hélio Oiticica

- Barbara Kruger
- Paul Vanouse
- Richard Long
- Gary Hill
- Bill Viola
- Mike Kelley
- Ben Rubin, Mark Hansen
- Jeffrey Shaw
- David Rokeby
- Camille Utterback
- Jim Campbell
- Carolee Schneemann
- Ken Feingold
- Knowbotic Research
- Michael Naimark
- Simon Penny
Tamás Waliczky
Ólafur Elíasson
Janet Cardiff
James Turrell
Robert Irwin
Robert Smithson
Mariko Mori
Jennifer Pastor
Vito Acconci
Alan Kaprow
Stelarc
Lynn Hershman
Peter Weibel
Vallie Export
Chris Burden
Marina Abramovic
Hermann Nitsch
Robert Gober
Jean Tingueley
Dan Graham
Pierre Huyghe
Andrea Zittel
Char Davies
CLUI
SymbioticA
The Yes Men
Wim Delvoye
Thomson & Craighead
Bruce Nauman
Bill Seaman
Masaki Fujihata
George Legrady
Survival Research Lab
Gordon Matta-Clark

.......I'm tired and have too many to list. Please add!

Tools

- Max/MSP/Jitter
- David Rokeby - softVNS
- Cyclops
- Miller Puckette (pd - alternative to Max)
- pure data
- Processing
- Davy Jones Design

Max Resources

- Max Resource Guide
- Berkeley CNMAT
- Max Objects Database
- Jasch
- Jaffe Objects
Example Proposals

- when no one is looking (proposal)
- videopedia
- Torrent Raiders Proposal
- slowLab > SLOWmail > project overview
- RHIZOME PROPOSAL
- PulsePool < SmartSpaces < TWiki
- mw2mw
- Oppera Internettikka - Protection et S©urit©
- Michael Mandiberg - Real Costs
- MUTI-USER ONLINE VIDEO EDITOR

Other Links

- Mold Making
- Plaster Mixing
- More on Mold Making

Other Resources for thought

- Definition of Neoliberalism
- History of meaning of Mimesis
- Some insight into the world of Vanessa Beecroft
- Hyper and Deep Attention: The Generational Divide in Cognitive Modes by N. Katherine Hayles
- Definition of Structuralism
- Definition of Post Structuralism
- Definition of the Spectacle
- Situationist International
- The Eye and The Gaze
- Politics of Installation, Boris Groys
- Is a Museum a Factory?, Hito Steyerl
- (Untitled) - movie
- Microsoft Table

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- This page was last modified on 25 October 2012, at 11:38.
S13-Installation/resources

From stenner:teaching

Resources

List of various resources to illustrate the diversity of what is available. This is by **NO** means exhaustive! Please add what you find interesting!


SA+AH logo

SA+AH logo.zip

Helpful Tutorials

Arduino Laser Tripwire Tutorial

Microcontrollers

- Make Controller
- EZIO
- Arduino
- Phidgets
- moteiv
- jStamp
- BlueSense
- BASIC Stamp
- Sun SPOT
- Critter (video critter looks cool)
Interface with Arduino

- Arduino Sensor to Max/Msp - The easiest way using the Graph Example
- Starting Point for Max/MSP Arduino interface
- Messenger - Arduino + Max/MSP, PD, etc.
- Maxuino
- Freeduino
- XBee + Arduino Tutorial

Sensors + Suppliers

- Force, Pressure, Touch Sensors
- Conductive Foam
- Jameco
- Digikey
- HTM Sensors
- Automation Direct
- Spark Fun Electronics (source for Arduino)
- Adafruit (source for Arduino)
- HB Electronics
- Naturalpoint
- LED Supply
- Happ Controls
- Ultimarc - Arcade Controls
- Luminex - Light emitting fibers
- Imagesco
- Infusion Systems - ICubeX + Sensors
- Allied Electronics
- Acroname Robotics
- Measurement Specialties
- JL Cooper
- All Electronics
- Mouser Electronics
- MaxBotix Sonar rangefinders at SparkFun
- Maxbotix Website
- Piezo Systems
- Air Muscle Tutorial
- Trossen Robotics Linear Actuators - you can get these elsewhere of course.
- Grainger 12vdc Linear Actuators

Video + Computer Vision

- Security Spy
- UniBrain
- CMUcam
- The Imaging Source
- Motion Tracking with Apple Motion

Multi-touch FTIR and Laser
Automatic Projector Calibration

- Automatic Projector Calibration at Hackaday.com

Reading

- "Practical Electronics for Inventors", Paul Sherz ISBN 0071452818
- "Installation Art in the New Millennium: The Empire of the Senses", De Oliveira ISBN 0500284512
- "The Design of Everyday Things", Donald Norman ISBN 0465067107
- "The User Illusion: Cutting Consciousness Down to Size", Tor Nørretranders ISBN 0670875791
- "Getting Started in Electronics", Forrest M. Mims III ISBN 0945053282

Miscellaneous

- Infrared Basics
- Electronics Club (info)
- Physical Computing at ITP
- Arduino Workshops
- Cheap Head Tracking
- Bill Buxton
- HCI I/O
- FaceMount Permanant Adhesive
- ClearPolyester Film
- Clement Greenberg, "Modernist Painting"
- LED Calculator - This LED calculator will help you design your LED array and choose the best current limiting resistors values.
- Resistor Calculator - Easily decode the color bands on a resister on this page.
- Electronics Beginning Tutorial - RESISTORS

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This page was last modified on 25 October 2012, at 11:37.
Stenner:teaching:University Policies

Academic Honesty

(See UF Rule 6C1-4.017 (PDF) Students are required to be honest in all of their university class work. Faculty members have a duty to promote ethical behavior and avoid practices and environments that foster cheating. Faculty should encourage students to bring incidents of dishonesty to their attention. A faculty member, in certain circumstances, can resolve an academic dishonesty matter without a student disciplinary hearing. The procedures and guidelines are available from the Director of Student Judicial Affairs. In the fall of 1995, the UF student body enacted a new honor code and voluntarily committed itself to the highest standards of honesty and integrity. (See UF Rule 6C1-4.0172 (PDF)

The Honor Code

We, the members of the University of Florida community, pledge to hold ourselves and our peers to the highest standards of honesty and integrity. On all work submitted for credit by students at the university, the following pledge is either required or implied: "On my honor, I have neither given nor received unauthorized aid in doing this assignment." More on these policies can be found in the UF STUDENT GUIDE.

Accommodations for Students with Disabilities

Support services for students with disabilities are coordinated by the DISABILITY RESOURCE CENTER in the Dean of Students Office. All support services provided for University of Florida students are individualized to meet the needs of students with disabilities. To obtain individual support services, each student must meet with one of the support coordinators in the Disability Resources Program and collaboratively develop appropriate support strategies. Appropriate documentation regarding the student's disability is necessary to obtain any reasonable accommodation or support service.

Computer Use and Acceptable Use Policy

All faculty staff, and students of the University of Florida are required and expected to obey the laws and legal agreements governing software use. Failure to do so can lead to monetary damages and/or criminal penalties for the individual violator. Because such violations are also against University policies and rules, disciplinary action will be taken
Disruptive Behavior

Be advised that you can and will be dismissed from class for disruptive behavior. More detailed information on this can be found in the UF RULES AND POLICIES.

HEALTH AND SAFETY

Please familiarize yourself with the UF SA+AH Health and Safety Handbook, available online at: http://arts.ufl.edu/art/healthandsafety

- In particular download and familiarize yourself with the Art + Technology area specific guidelines linked here.