

TECHNOLOGY AND PERFORMANCE

INSTRUCTOR

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COURSE DESCRIPTION

Technology and Performance surveys instruments and theories of electronic performance, both audio and visual. As we move towards a society of greater media participation and production, new tools emerge that enable people to perform live, electronic audiovisual works with much greater ease than was previously possible. The increasing availability of such tools bring fresh importance to questions about the nature of performance itself. These questions range from discussing arguably subjective classifications (Is a laptop DJ a musician? Is a live coder a visual artist?) to praxis (How does a laptop performer effectively engage an audience?).

The course will divide its time between viewing and discussion of recorded and live performances, a survey of technologies for students to use in their own performances, seminar discussions on the nature of electronic performance grounded in assigned readings, and preparation for group and individual class performances. Students will be expected to perform publicly two times during the quarter, once for a live audience and once as part of a live webcast. Collaborative performance is strongly encouraged.

GRADING

Class Participation / Reading Assignments / Blog entries - 25%

Performance 1 : Webcast - 25%

15 minute individual presentation on a researched performance tool - 10%

Performance 2 : Live audience - 35%

ATTENDANCE

Class participation is strongly encouraged. Missing more than 2 sessions without prior notification to the instructor will drop your grade by 10%. You will not be able to pass the course if you miss more than 4 classes.

COURSE OUTLINE

Week 1 . Introduction

Lecture - Course overview / overview of performance technologies
- Viewings of live performances

Lab - Basic Tools : Native Instruments Traktor / Ableton Live / ArKaos VJ

Week 2 . The Nature of Electronic Performance

Lecture - Discussion of readings
- Audience paradigms, audience interaction

- Virtuosity and Technology
- Lab - Tools : Ableton Live, Open source VJ applications (OpenTZT etc.)

Week 3 . The History of Electronic Performance

- Lecture - Audiovisual Performance history
 - Discussion: How do the historical examples discussed promote audience interaction and/or technical virtuosity? How were they successful? How did they fail?
- Lab - Graphical Programming Languages (Pd, Quartz Composer)

Week 4 . Preparation for Performance 1

Dual Labs this week focusing on collaboration and practice in preparation for first live performance

Week 5 . Performance # 1 and Hardware Control Devices

- Performance - Live webcast of student performances followed by group critiques
- Lecture - Introduction to controllers for live performance
 - MIDI, OSC, HID Protocols
 - History of performance interfaces
 - Current commercial interfaces
 - DIY interface kits (Arduino etc.)

Week 6 . Audio Visual Synchronization

- Lecture - Synesthesia, color / pitch mappings
 - Alternatives to one-to-one mappings
 - Experiments in abstract animation
- Lab - Object Oriented programming in Processing
 - Using hardware with the programs we've discussed so far

Week 7. Experimental Performance 1 - Live Coding & Networked Performance

- Lecture - Live Coding (Chuck, Flaxus, live circuit bending etc.)
 - Networked Performance
 - History of Network Performance
 - Overview of network architecture (OSI Model, IP, UDP etc)
 - OSC in detail
- Lab - Using Chuck and Flaxus
 - Creating performance networks using OSC
 - Begin working on final performance

Week 8 . Student Presentations

Lecture - Student presentations discussing researched performance tools

Lab - Final performance preparation / review as needed

Week 9 . Experimental Performance 2 - Non-Human Collaboration & Biological Signals

Lecture - Robots and Artificial Intelligence in performance

- Audience participation and ubiquitous computing

- Physiological sensor data in performance

Lab - Final performance preparation / review as needed

Week 10 . Preparation for Performance 2

Dual labs this week focusing on collaboration and practice in preparation for the second live performance

Week 11 . Final Performance

Student performances in front of a live audience; location and time TBD.