

18. Documentation attached:

☐ Syllabus ☒ Detailed Course Outline

19. If this course has been offered as a topic, please enter topic abbreviation, number, and suffix:*

20. How often will this course be offered once established? 1 time / academic year

PROGRAM DIRECTOR/CHAIR - COLLEGE CURRICULUM COMMITTEE SECTION:

(Mandatory information – all items in this section must be completed.)

21. Does this course fulfill a requirement for any major (i.e., core course or elective for a major, majors in other departments, minors in other departments)? ☒ Yes ☐ No

If yes, please specify:

UD studio elective for Arts, Media and Design

22. Does this course impact other discipline(s)? (If there is any uncertainty as to whether a particular discipline is affected, check "yes" and obtain signature.) ☐ Yes ☒ No

If yes, obtain signature(s). Any objections should be stated in writing and attached to this form.

Discipline _____ Signature _____ Date _____ Support _____ Oppose _____

Discipline _____ Signature _____ Date _____ Support _____ Oppose _____

SIGNATURES : (COLLEGE LEVEL) :

Lucy HG Solomon  1/20/2016

1. Originator (please print or type name) _____ Date _____

 4/13/16

2. Program Director/Chair _____ Date _____

 3/18/16

3. College Curriculum Committee _____ Date _____

 3/24/16

4. College Dean (or Designee) _____ Date _____

(UNIVERSITY LEVEL)

5. UCC Committee Chair _____ Date _____

6. Vice President for Academic Affairs (or Designee) _____ Date _____

7. President (or Designee) _____ Date _____

AMD408

Stimulus and Response: Interactive Technologies

The course aims to enable the student to explore existing and emerging models of digital interactive practice within a wide range of media and artistic approaches including visual art, computing, installation, video, performance and sound. Students will utilize the conceptual approaches of fine art and visual communication, the storytelling and narrative attributes of filmmaking, the kinetic possibilities of the body, and the production and teamwork capabilities of communication and media. The course explores the ways by which ideas about interactivity can and might be realized through project work. Key elements include workshops (production, applications, demonstration, media), programming, research, team building and awareness, design management, and individual/group projects. Although various approaches to interactivity will be explored, we will focus on learning MAX/MSP and Jitter to control visual and auditory environments.

Student Learning Outcomes:
Students will be able to:

- Analyze the operation and application of interactive technologies through research and hands on learning
- Explore interactive computer interfaces that include a variety of physical interaction through the research and experimentation
- Create art works that include user interaction or participation through hands on activities that bring a new understanding of the art making process itself
- Explain the dynamics of viewer interaction, and how it is generative of art forms that are open ended, through the production and study of such art forms, theoretical research and historical understanding
- Utilize the basic tools of programming software that can be applied to the creation of interactive art forms
- Evaluate how new media has developed from traditional art forms through the study of art history and design

Grading is based on the development and production of a final project, work in progress presentations and assignments, and the completion of assignment reading accompanied by discussion.

This course will meet the All University Writing Requirement of at least 2,500 words.

Students will be evaluated based on participation as well as on assignments and collaborative assignments, as well as a mid-term and final.

Graded items include:

Final Project	20%
Article Discussion	5%
Reading Assessment	15%
Analysis Paper	15%
Presentations	15%
Mid-term	15%

Final

15%

Total 100%

Course Outline:

Weeks 1-3 Introduction, background, resources

1. Hardware and software overview:

Max/Jitter What is digital video?

The Max/MSP/Jitter

relationship Max Review

External

Control Data

Translation

Decision

Making

Automation

Timing

2. Installation examples

3. Performance examples

4. Data remapping examples

5. Assignment I: system

diagramming Week 4 Data-flow

programming

1. Objects, messages

2. Math, logic

3. Encapsulation, functional decomposition

4. Programming style, debugging

5. Assignment 2: max tutorials,

tests Week 5 Visual data

representation

1. Matrices, planes

2. Image and video file import

3. Compositing and filtering

4. Assignment 3: Jitter tutorials, tests

Week 6 Visual I/O

1. Video: composite, DV, uncompressed digital, wireless, VGA
2. Projection: surfaces, geometry, distortion correction
3. Visual Tracking: color, motion, analysis tools
4. Assignment 4: live video manipulation

Weeks 7-8 Sound

1. Digital audio introduction
2. Input, output, modifying properties
3. Processing sound clips
4. Interfacing with video

Weeks 9-10 Communications / networks

1. Send / receive video + sound
2. Web upload / download
3. LAN/WAN communications (TCP/UDP connections)
4. MIDI, Bluetooth

Weeks 11-13 Motion Control

1. Sensors, electronics interface options
2. MIDI

Weeks 14-16 Final project (Assignment 6)

1. Presentations
2. Evaluations