

## **DANCE 661: Advanced Problems in Movement Analysis**

**Room:** Studio S

**Fridays:** 3pm – 5:30pm

### **SYLLABUS**

**Instructor:** Dr. Jhalak Kara Miller

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**Office Hours by Appointment**

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#### **Course Overview**

Advanced Problems in Movement Analysis analyzes dance and the moving body as it intersects with forms of new media. The course includes lectures, screenings, and collaborative projects. Projects emphasize hands-on experience and creative production. Working in teams, students are responsible for completing interactive digital media performance projects and conducting movement analysis studies of live and digital performances. Effective collaboration between team members is an important part of the collaboration.

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#### **Desired Student Learning Outcomes:**

1. Students will be able to identify and define the varying approaches to the use of new media in documentation, dance reconstruction, education, and live internet performance.
  2. Students will be able to understand, analyze, and communicate observation and structural details of movement in digital movement analysis research.
  3. Students will be able to produce documentation of choreographic works that demonstrate the ability to understand movement analysis principles and theory.
  4. Students will have an awareness of the theoretical, conceptual, and historical aspects of the use of different approaches and modes of inquiry in movement analysis in new media in dance in the 20<sup>th</sup> and 21<sup>st</sup> century.
  5. Students will be able to provide meaningful contributions to class discussions and presentations, as well as effectively engage in self and peer evaluations of assigned coursework.
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#### **Course Requirements**

In class discussions, class activities, and media training are vital. Movement analysis studies and short media projects will be assigned each week. Articles will be posted on the course website.

#### **Required Materials and Supplies**

Video Editing Software, Isadora (instructions for downloading software will be given in the first class)

Laptop Computers in class, computer dongles for vga or hdmi cables

## Software and Equipment Used in Class

Premiere

Isadora

Production equipment will be available for you to check out.

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## Attendance

In-class discussions, movement activities, screenings and video lab time are extremely important in this class, and attendance/participation figures into the final grade. Regular attendance and participation are vital and figure into the final grade. Each student will be allowed one excused absence. Each additional absence will result in a 3% grade deduction. Regular tardiness will result in a 3% grade deduction.

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## Assessment Evaluation -

Class Attendance, Participation	25%
Weekly Image Assignments	5
Online Broadcast Channel Performance and Analysis	10
Isadora Software and Movement Analysis	10
Dance Kiosk/Living Walls Installation	10
Zoom Interactive Performance and Location Sharing	10
Mid-Term Research Paper (8-10 pgs)	15
Final Project Presentation	15
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TOTAL	100

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## Readings

*Articles will be posted online on the course website.*

### *Additional Texts:*

*Making Connections. Total Body Integration through Bartenieff Fundamentals.* Peggy Hackney.  
*The New Media Reader.* Noah Wardrip-Fruin and Nick Montfort.

See a list for online links and e-books available in the library under references at the end of the syllabus.

## **SCHEDULE**

### **INTRODUCTION**

#### **1-11**

Introduction

Syllabus review

Brainstorming on research sites and topics

### **ONLINE PERFORMANCE AND DANCE ON THE INTERNET: SYNTHESIZING TOTAL BODY INTEGRATION ONLINE**

#### **1-18, 1-25**

Critical analysis of movement in performance from the performers and viewers perspective

Understanding the kinesthetic on screen

Broadcast channels and web recording techniques – ustream, livestream

\*1-18, 3pm – 4pm Guest Lecture: Spinning Goats presentation about livestream performance, online location sharing, and interactive video projects in France, Hawaii, and Korea.

#### **Assignments:**

Cyberdance “rich” movement description of body/space analysis

Live Internet Broadcast Performance Study Utilizing Livestream

Weekly Image Post

\*\***(1-20):** Sun at Waimanalo Beach Park– attend A Slow Awakening Beach Clean Up and New Media event (8am-11am), Livestream practice from Beach, Free, Extra Credit 5%

### **ISADORA SOFTWARE AND MOVEMENT ANALYSIS**

#### **2-1, 2-8, 2-15**

Isadora Software and Projection Design (flexible graphic programming environment that provides interactive control from body initiation over digital media)

Movement analysis of the live dancing body and the projected screen dancing body in relationship in performance

Dance and digital interactivity

\*2-1, 3pm – 4pm Guest Lecture: Dr. Rich Rath. Dr. Rath will demo his MAX msp patch which enables dancers to interact with a digital audio/video signal that creates a mix of real time audio processing and a visual display of movement in an audio/visual/kinetic projection.

#### **Assignments:**

Filming and editing of projection design study using Isadora Movement Analysis Software

Creation of projection performance using Isadora and peer review

Weekly Image Post

**DANCE AND NEW MEDIA INSTALLATION: DEFINING RELATIONSHIPS  
BETWEEN LIVE PERFORMING BODIES AND DIGITAL PROJECTED BODIES  
2-22, 3-1**

Body/movement mechanics on screen

Reconstruction and Documentation: Moving Bodies Recorded In the Archive

Using labanotation scores and video/film for documentation

Ethics of recording dance for documentation purposes

This section focuses on hybrid media/dance works that combine live performance of contemporary dance with projected imagery derived from dance altering size and space. These can be regarded as “dance film in performance” and are developed with the intention of connecting choreography for stage with choreography for camera altering size and space. Other works, conceived as “dance film for the screen,” work with filmed choreography to create a screen experience independent of the performance experience it is derived from.

**Assignments:**

Dance Kiosk Installation/Living Walls Installation

Film, Edit and Create a media projection design. Fully choreograph a dance with the projection as if it is a dancing body or additional dancer in your choreography. Analyze the movement in 2D and 3D form.

Weekly Image Post

**HISTORY OF DANCE AND MEDIA CLASSES**

**3-8 Class meets online only on this date**

Review online course presentations. Read Assigned Articles and Outside Research. Write a conference paper based on movement analysis of the live body in relation to dance for the camera, live performance interactivity, online dance performance networks, or dance in video projection design. 8 - 10 pages due 3-15.

**3-15 Class meets in Studio S with Guest Artists Alicia Guy and Guy**

Lecture: Alicia Guy and Donald Guy Dance. Video Mapping and Technology education partnership with Cirque du Soleil

Movement Exchange: livestream movement project exchange with dancers in Seoul, Korea (tbd)

**SPRING BREAK**

**3-22**

**MOTION CAPTURE**

**3-29**

A practical introduction to the basic principles of optical motion capture and how this technology can be used for creating computer movement analysis of human figures, with a primary focus on creative applications to dance.

Guest: Dr. Jan Prins, developer of multiple high-speed cameras in the biomechanical analysis of swimming stroke mechanics in the UHM Kinesiology program. 3-4pm Studio S, 4pm – 5:30 Prins Lab at the UHM Dive Pool.

**TEMPORARY PHYSICAL INTERACTION ACROSS A DISTANCE: PERFORMATIVE ACTS TRANSFORMED BY LOCATION SHARING AND INTERACTIVE DIGITAL MEDIA**

**4-5, 4-12**

An experiential introduction to telepresence and interactive digital media performance. The term "embodied telematics" describes a process that links human physical activity between two or more geographically dispersed sites, through the mediation of an interactive system, creating a shared environment of mutual influence and responsive behaviors through location sharing. Focus on notions of telepresence.

**Assignments:**

Project – Create, design, and project an interactive online zoom performance (rehearse with groups at a distance), Analyze kinesthetic relationships between the digital body and the live body while rehearsing and performing together at a distance.

Weekly Image Post

**FINAL PROJECT LAB**

**4-19** Outside Performance Space Rehearsals (Select one of your class projects and revise according to class review. Collectively produce a first Friday dance and new media installation performance). Meet to work onsite and run through at location on 4-19.

**4-26** This class session and the finals week session will meet instead on Friday 5-3, 7pm – 11pm for final project presentations.

**FINAL PROJECT PERFORMANCES**

Friday 5-3 First Friday Performances of Final Projects 7pm – 11pm Chinatown

Final project presentations – perform interactive online project, broadcast live, record, and analyze

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Hawaii Film Festival  
<https://www.hiff.org/>

Hula Preservation Society.  
<http://www.hulapreservation.org/>

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### **List of Dance Film Festivals**

<http://www.dancefilms.org/other-dance-film-festivals/>

#### **Argentina**

[FESTIVAL VIDEODANZABA](#)

#### **Australia**

[REEL DANCE](#)

#### **Austria**

[DANCE SCREEN](#)

#### **Belgium**

[ARGOS FESTIVAL](#)  
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#### **Brazil**

[SAO CARLOS VIDEODANCE FESTIVAL](#)  
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**Japan**

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[MOVES, International Festival of Movement on Screen](#)

[RAINDANCE FILMFESTIVAL](#)

[U DANCE](#)

**United States of America**

[CUCALORUS FILM FESTIVAL](#)

[DANCE CAMERA WEST](#)

[DANCE ON CAMERA FESTIVAL](#)

[DANCE AND NEW MEDIA FILM FESTIVAL, TISCH SCHOOL OF THE ARTS](#)

[INTERNATIONAL SCREENDANCE FESTIVAL, AMERICAN DANCE FESTIVAL](#)

[EMPAC DANCE MOVIES](#)

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[THE OUTLET DANCE FILM FESTIVAL](#)

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