

## **Beginning Holography**

Art and Technology || Fall 2017

Kayla Lewis || klewis6@saic.edu

Tuesday and Thursday || 6:00pm - 9:00pm

Maclean 414

### **Course Description**

In this introduction to the theory, tools, and techniques of three-dimensional imaging, students study the structure of light and the ways in which it can convey information, and familiarize themselves with the basic tool of holography, the laser. Students make several different styles of holograms, some viewable in laser light, and some in white light. Techniques involving spatial juxtaposition and montage are also explored. The focus is on developing a working knowledge of the medium from the perspective of its artistic possibilities.

### **Projects**

#### **Project 0: Mastering technique**

Create three monochromatic transmission and three monochromatic reflection holograms. Choose/make objects that will create optimal holograms and focus on the technique/lighting setup.

#### **Project 1: Capturing a moment in time**

Using both monochromatic transmission and reflection, students will set up still shots of objects they have curated and shoot three holograms. The pieces should work as a triptych.

#### **Project 2: Mixed media**

How can holography work with other media? Students are encouraged to use words, performance, digital pieces, etc. to create a work that intertwines holography. These works will make use of full color transmission and/or reflection holograms

#### **Project 3: Collaboration**

Holographic printing allows for quick outsourcing of holograms and full use of 3d modeling and frames. The class will come up with a theme to cover, and each student will contribute a model to a class hologram that will be displayed on the ATS floor.

#### **Project 4: Tell a story**

Students will focus on the use of holograms to tell a story. Using either analog or digital means, the final presentation must demonstrate an understanding of holographic techniques and create an optimal viewing environment for the story to unfold.

### **Schedule**

#### **Getting Started**

8/31

Class Intro: Go over the course agenda, projects, and syllabus

Intro to Holography  
Shoot monochromatic transmission hologram as a class  
*Bring objects to shoot for next class*

## **Intro to Holography**

9/5  
Intro to Monochromatic Transmission  
Demo: Optimal shooting objects/placement and Monochromatic Transmission setup  
Project 0: Shoot 3 Mono Transmission

9/7  
Intro to Rhino  
i/o Lab authorization (TBD)

## **Fundamentals of Light**

9/12  
Let's Talk About Lasers  
Brainstorm Project  
Rhino Workshop  
Begin modeling objects for Project 1

9/14  
Brainstorm and define Project 1  
Project 0.5: Demo and shoot monochromatic reflection holograms  
*Surrealist Manifesto reading for next class: Read the underlined text, and the rest if you want*

## **Toward an Absolute Reality**

9/19  
EK Lab authorization (TBD)  
Continue working on Project 1  
Go over reading

9/21  
Finish Project 1 models  
Shoot Project 1 holograms - mono reflection and/or transmission

## **From Optics to Art**

9/26  
Workday

9/28  
Prep for Project 1 critiques  
Critique Project 1

## **Full Color**

10/3

Finish Project 1 Critique

Lesson: Full-color transmission

Practice shoot

10/5

Visit AIC

Shoot two more full color transmission

Brainstorm Project 2

*Reading for next class: "The Aesthetic Message of Holography"*

10/7

MAKEUP CLASS (Tentative Date)

Go over reading

Workday

## **Absurdity**

10/10

Class Canceled

10/12

Lesson: Full color reflection

Shoot full color reflection

Work on Project 2

## **Fields of Vision**

10/17

Workday

10/19

Finish Project 2

Critique Project 2

Brainstorm for HOLOween show

## **Break the Rules**

10/24

Workday - modify old projects for show, or create new ones

Individual check-ins

10/26

Finish prepping for show

10/27

HOLoween Show from 5-7pm in the Flex Space

### **In the Realm of the Pataphysical**

11/2

3D Modeling: Maya Intro

Figure out teams and brainstorm Project 3

Workday

*Reading: Crystallography by Christian Bok excerpt*

11/7

Workday

### **Digi-holo**

11/9

Workday

Submit Project 3 to Geola by end of class

### **Poetics of Science**

11/14

Workday

11/16

Intro to Project 4 (final)

4x5 Demo Transmission and Reflection

Workday

*Read "Colonization of Venus" for next class.*

### **A Network of Holographers**

11/21

Discuss reading

Modern Day Holography Resources and Opportunities

Present Final Project ideas and plans

Workday

### **Four Dimensional Art**

11/28

Workday

Project 4 Progress Check in

Submit Print to Geola for final (if using for final)

## **Week 15**

CRIT WEEK

### **Four Dimensional Art ctd.**

11/30

Workday

12/12

Workday

Prep for final Crit

### **The End**

12/14

Final Projects Critique

\*subject to change

#### Student Attendance

SAIC policy states that students are expected to attend all classes regularly and on time.

Students should miss class only with reasonable cause. If a student needs to miss class with reasonable cause, it is the student's responsibility to contact the instructor to receive instruction for how to make up for the missed class. It is the instructor's responsibility to give this information to the student as his/her/their schedule permits. Missing class for other than a reasonable cause may jeopardize the student's academic standing in the class.

SAIC's recommended institutional policy is as follows: If a student misses MORE than three classes, whether or not for a reasonable cause, the student will fail the class, if the student does not withdraw from the class prior to the deadline for withdrawal with a grade of "W." Deadline for withdrawal: November 1, 2016 (fall semester).

Reasonable cause to miss a class might include:

- Illness or hospitalization (the student should contact Health Services, who will relay information to the faculty in whose class the student is enrolled)
- Observation of a religious holiday
- Family illness or death

#### Academic Misconduct

From the SAIC Student Handbook:

Academic misconduct includes both plagiarism and cheating, and may consist of: the submission of the work of another as one's own; unauthorized assistance on a test or assignment; submission of the same work for more than one class without the knowledge and consent of all instructors; or the failure to properly cite texts or ideas from other sources.

Academic integrity is expected in all coursework, including online learning. It is assumed that the person receiving the credit for the course is the person completing the work. SAIC has processes in place that protect student privacy and uses LDAP authentication to verify student identity.

Specific procedures for faculty to follow in the case of academic misconduct are detailed in the Student Handbook.

Additional resources for students:

- Read "Plagiarism: How to Recognize It and Avoid It: a short guide prepared by the Faculty Senate Student Life Subcommittee in 2004.
- Read the Flaxman Library's quick guide titled "AVOID PLAGIARISM."

### Accommodations Statement

Accommodations for Students with Disabilities:

SAIC is committed to full compliance with all laws regarding equal opportunities for students with disabilities. Students with known or suspected disabilities, such as a Reading/Writing Disorder, ADD/ADHD, and/or a mental health condition who think they would benefit from assistance or accommodations should first contact the Disability and Learning Resource Center (DLRC) to schedule an appointment. DLRC staff will review your disability documentation and work with you to determine reasonable accommodations. They will then provide you with a letter outlining the approved accommodations for you to deliver to your instructors. This letter must be presented before any accommodations will be implemented. You should contact the DLRC as early in the semester as possible. The DLRC is located within the Wellness Center on the 13th floor of 116 S Michigan Ave. and can be reached via phone at 312.499.4278 or email at [dlrc@saic.edu](mailto:dlrc@saic.edu).

### The Writing Center

MacLean Center Basement, 112 S. Michigan Ave., B1-03  
[writingcenter@saic.edu](mailto:writingcenter@saic.edu)

Fall and Spring Semester Hours

Monday – Thursday: 9:00 AM - 7:15 PM; and Friday 9:00 AM - 5:15 PM

4:15–7:15 PM are designated as walk-in hours Monday–Thursday

SAIC offers free, hour-long writing tutorials at the Writing Center, which is located in the basement of MacLean. Tutors are available to assist all currently enrolled students with any stage of the writing process.

### Appointments

To schedule an appointment with a Writing Center tutor, students first need to create an account through the online sign-up system: <https://www.supersaas.com/schedule/saic/WritingCenter>.

Once students have set up their own account, they may sign up for appointments. Weekly standing appointments are available upon request. When students come to their tutoring appointments, they should make sure to bring their assignments with them and have any work printed out.

Online schedule instructions are available outside of the Writing Center suite (in the hallway outside of the MacLean Center B1-03).

### Contact Information

Leila Wilson, Writing Center Coordinator: [lwilson@saic.edu](mailto:lwilson@saic.edu) or 312.345.3588

Writing Center Suite: 312.345.9131. (Call to see if there are any last-minute openings.)