From Nano to Stardust

From Nano to Stardust – INTRO TEXT

Faculty and staff:

**UCLA Professors (curriculum / lectures):**
Dr. Victoria Vesna, Art|Sci Center, Department of Design Media Arts, Founder + Director
Dr. James Gimzewski, Department of Chemistry, Scientific Director
Dr Adam Stieg, CNSI Associate Director, SciArt Director Emeritus

**Visiting Professor:**
Dr. Clarissa Ribeiro, Innovation and Prototype Lab Director, UniFor, Brazil

**Instructors:**
Kaitlin Bryson, MFA, Lead Instructor, UCLA Art|Sci
Monica LoCascio, MFA student, Angewandte, Vienna, Austria
Shane Houchin, PhD Student, Geology, CalTech
Mick Lorusso, MFA, Los Angeles
Sam Lilak, PhD researcher, Chemistry, Dr. Gimzewski Lab
Zeynep Abes, Design Media Arts, Graduate Student

**Assistant instructors:**
Andrew Ortiz, Undergraduate student, Design Media Arts
Ivana Dama, Undergraduate student, Design Media Arts

**Week 1**

**DAY 1 | MON 07.27.20 INTRO TO SCI|ART & NANOSCIENCE**
9:00 - 10:30  Introduction to ScìArt Lab+Studio – Remote edition, intro and guide to online instruction

Welcome Art & Science
Collaborations: Towards a Third culture | Prof. Victoria Vesna

CNSI Welcome | Dr. Adam Stieg
Sci Art Collaborations | Prof. James Gimzewski

10:30 – 10:45  Break

10:45 – 12:00  BIO-Hacking your home: How to create a lab in your kitchen or bathroom | Mick Lorusso, Kaitlin Bryson and Clarissa Riberio

12:00 - 1:00  Lunch

1:00 - 2:00  Workshop: DIY Microscopy

2:00 - 2:15  BREAK

2:30 - 4:00  ScìArt in practice: Instructor Introductions
Kaitlin Bryson, Mick Lorusso, Clarissa Riberio, Monica LoCascio, Shane Houchin, Zeynep Abes, Ivana Dama, Andrew Ortiz

4:00 - 4:30  How to write Blog Posts

DAY 02 | DAY 07.28.20 UNDERSTANDING NANO | TIME TO BE REALLY SMALL

9:00 - 9:15  Review and prep for day

9:15 - 9:45  Lecture: Nanotechnology | Vuk Uskoković

9:45 - 10:00  BREAK

10:00 - 11:00  Lecture: Tools of Visualization | Dr. Adam Stieg

11:00 – 11:15  BREAK

11:15 – 12:00  Lecture: VR/AR Lecture | Zeynep Abes

12:00 - 1:00  Lunch
1:00 - 3:00 Workshop: VR/AR | Zeynep Abes

3:00 - 3:30 Introduction to Final Project | Kaitlin Bryson

3:30 – 4:00 BREAK

4:00 – 5:00 Virtual Lab tours:
  - Optical Microscopy - ALMS Core Lab
  - Electron Microscopy - EICN Core Lab
  - Scanning Probe Microscopy - NPC Core Lab
  - Nanofabrication - ISNC Clean Room

DAY 3 | WED 07.29.20: BIOLOGICAL MINDS | MOLECULES | MYCELIUM | BACTERIA

9:00 - 9:15 Review and prep for day

9:15 - 10:15 Lecture: The Extreme Powers of the Microscopic, Mycelium and Bacteria | Kaitlin Bryson + Mick Lorusso

10:15 – 10:30 BREAK

10:15 - 12:00 Workshop: DIY home cultivation: Mycelium//Bacteria | Kaitlin Bryson + Mick Lorusso

12:00 - 1:00 Lunch

1:00 - 3:00 Workshop: Clarissa Ribeiro | Psychobiotonic and our microbiomes

6:30 - 9:00 Watch party: SciFi film series

DAY 4 | THU 07.30.20: ECOLOGICAL NETWORKS and SYSTEMS THINKING

9:00 - 9:15 Review and prep for day


10:15 – 10:30 BREAK

10:30 – 12:00 Workshop: ArcGIS // Remote Sensing | Shane Houchin

12:00 - 1:00 Lunch
1:00 - 3:00  Workshop: ArcGIS // Remote Sensing | Shane Houchin
Assignment: complete mapping project and blog

DAY 5 | FRI 07.31.20  SPACE

9:00 - 9:15  Review and prep for day

9:15 - 10:15  Lecture: Alien Stardust | Victoria Vesna + Eli Joteva

10:15 – 10:30  BREAK

10:30 – 12:00  Lecture: Photogrammetry | Zeynep Abes

12:00 - 1:00  Lunch

1:00 - 3:00  Workshop: Photogrammetry | Zeynep Abes

3:00 - 4:30  MIDTERM: discussion + assignment

6:30 - 9:00  Sci-Fi Film Series: 2001: A Space Odyssey
Complete photogrammetry assignment and blog

DAY 6 | SAT 08.01.20  VIRTUAL FIELD TRIP

9:00 - 12:00  The Getty Conservation Center

DAY 7 | SUN 08.04.19

REST!

Week 2

DAY 8 | MON 08.03.20: FOLDING, CUTTING, LINKING

9:00 - 9:30  Review Week 1 | Intro Week 2

9:30 – 12:00*  Lecture and workshop: CRISPR Applications & Implications | Sam LoCascio
*includes breaks*
12:00 - 1:00  Lunch

1:00 – 3:00* Final project midterm proposals
*includes breaks*

3:15 – 3:30 BREAK

3:30 - 5:00 Workshop: Origami, DNA & Architecture | Clarissa Ribeiro

7:00 - 9:00 Watch Party: NOVA: Origami Revolution

DAY 9 | TUES 08.04.20 INVESTIGATION

9:00 - 9:15 Review and prep for day

9:15 - 10:15 Lecture: Genetic engineering and animals

10:15 – 10:30 BREAK

10:30 – 12:00 Workshop: Processing & Coding | Andrew Ortiz

12:00 - 1:00 Lunch

1:00 - 3:00 Workshop: Processing & Coding | Andrew Ortiz

3:00 - 5:00 Assignment: Finish Processing & Coding

6:00 - 8:00 Hox Zodiac dinner

DAY 10 | WED 08.05.20 INSPIRATION

9:00 - 9:15 Review and prep for day

9:15 - 10:15 Lecture: Sound + Science | Clinton Van Arnam and Ivana Dama

10:15 – 10:30 BREAK

10:30 - 12:00 Workshop: Making instruments from our home environments | Ivana Dama and Clinton Van Arnam

12:00 - 1:00 Lunch

1:00 - 9:00 Studio time | Work on final projects
DAY 11 | THR 08.06.20 PERSPIRATION

9:00 - 9:15          Review and prep for day
9:15 - 10:15         Lecture: Ethics of Art + Science | Rita Blaik
10:15 - 12:00        Final projects // studio + check in
12:00 - 1:00         Lunch
1:00 - 9:00          Final projects // studio + check in

DAY 12 | FRI 08.07.20 CLOSING PROGRAM

10:00 – 11:00 am     Welcome & Program Review
11:00 – 1:00 pm      Final Presentations