



NYU

**TANDON SCHOOL
OF ENGINEERING**

ADVANCED DIGITAL MEDIA: HANDS-ON DESIGN: FABRICATION

INTEGRATED DIGITAL MEDIA

NYU TANDON SCHOOL OF ENGINEERING

SPECIAL TOPICS IN DIGITAL MEDIA DM-UY 4913 - E (16808)

Professor: Camila A. Morales

Fall 2023 Monday, Wednesdays: 6:00pm - 7:50pm, 370 Jay Street (Brooklyn Campus) RM 310

Email: camila.morales@nyu.edu

Office hours: by appointment only please book 24 hrs in advance by email

Course Description and Learning Objectives

This course explores the relationship between fabrication tools and contemporary artistic practice. Lectures and hands-on activities are integrated with computer-aided design (CAD) software to create individual or group projects.

The course will focus equally on conceptual and technical skills. We will cover the process of creating works using experimental modes of making from ideation to installation. Throughout the semester, students will explore various techniques such as research, design, prototyping and final fabrication.

Guest lectures with working artists will help students see design with a critical eye and further the discourse of art + technology.

Students will begin with a series of small technically driven projects giving them the opportunity to experiment with different fabrication tools and culminate with a group show that will display individual or collaborative artworks.

Students should be comfortable with:

- + basic programming and data management
- + interest in physical computing and fabrication
- + a hands-on studio environment with weekly critique
- + researching tools independently
- + drawing content from personal interests and studies to create a body of work

Process Documentation

Students will be expected to document their process throughout the semester. The format of this documentation will be a book that will contain all the work completed throughout the semester. Think of it as a portfolio that showcases your work; I would like you to include your reading responses, artist presentation, as well as process and final presentations for each project. A template will be given to the class; however I encourage each student to modify the template to fit their work best. My hopes are for each student to print and bind this book, however a pdf portfolio is also acceptable and will be expected at the end of the semester.

Assignments

1. Readings/ podcast: from handouts provided in class.
2. Short written comment (200-300 words) on the critical readings.
3. Artist/ Artwork Presentation
4. (3) Technical Workshops
5. Main Project: Final Project

File Naming

All PDFs and documents should be labeled as follows:

FirstnameLastname_projectName_date.pdf (ReginaGilbert_ArtProject_231026.pdf)

Grading

The grading criteria is based on the following items:

40% Class Project and Process Documentation

30% Technical workshops

10% Attendance

10% Contribution to class discussion of readings

10% Artist presentation

Attendance

+ Attendance is mandatory.

+ Unexcused absences will affect your grade. One absence is allowed; after that, your final, overall, numerical grade will drop by 5.0 percent (1/2 a grade point (e.g. A to an A-)) for each additional absence.

+ Be on Time. In the real world take this into consideration: "On time is late."

+ Contact the professor IN ADVANCE if you will not be in class (in person or email is preferred).

Academic Honesty

Please review NYU's School of Engineering's academic dishonesty policy in its entirety. All work for this class must be your own and specific to this semester. Any work recycled from other classes or from another, non-original source will be rejected with serious implications for the student. Plagiarism, knowingly representing the words, media, or ideas of another as one's own work in any academic exercise is absolutely unacceptable. Any student who commits plagiarism must re-do the project for a grade no higher than a D. In fact, a D is the highest possible course grade for any student who commits plagiarism. Please use the MLA or Chicago Manual of Style for citing and documenting source material.

Academic Accommodations

If you are student with a disability who is requesting accommodations, please contact New York University's Moses Center for Students with Disabilities at 212-998-980 or mosescsd@nyu.edu. You must be registered with CSD to receive accommodations. Information about the Moses Center can be found at www.nyu.edu/csd. The Moses Center is located at 726 Broadway on the 2nd floor.

Important Dates

First day of classes:	Tuesday, Sept 5
Add/Drop ends:	Monday, Sept 18
No classes:	Monday, Oct 9
Legislative Day, classes meet on a Monday schedule:	Tuesday, Oct 10
Break / No classes:	Wednesday, November 22 – Friday November, 24
Last day to withdraw with a 'W':	Monday, Dec 4
Last day of classes:	Friday, Dec 15
IDM Showcase:	TBD
Exam days:	Dec 18-22

Class Schedule:

September 6th:	First day of class – Maker Space Training
September 11th:	Intro Lecture – Maker Space Training
September 13th:	Workshop 1 – Tools + Fabrication Intro
September 18th:	Workshop 1 – Ideation presentation
September 20th:	Workshop 1 – Work Session
September 25th:	Workshop 1 Review
September 27th:	Workshop 2 – 2d drawing + Fabrication
October 2nd:	Workshop 2 – Ideation presentation
October 4th:	Workshop 2 – Work Session
October 9th:	No Class
October 10th:	Workshop 2 Review (Legislative Day)
October 11th:	Workshop 3 - 3d modeling + Fabrication
October 16th:	Workshop 3 – Ideation presentation
October 18th:	Workshop 3 – Work Session
October 23th:	Workshop 3 Review
October 25th:	Final Project Intro
October 30th:	Final Final Project Proposals due
November 1st:	Guest Artist & Work Session
November 6th:	Work Session
November 8th:	Work Session
November 13th:	Guest Artist & Work Session
November 15th:	Final Project Progress review
November 20th:	Work Session
November 22nd:	No Class
November 27th:	Work Session
November 29th:	Guest Artist & Work Session
December 4th:	Final Project Progress Review
December 6th:	Work Session
December 11th:	Work Session
December 13th:	Final Project Crit
December 20th:	Class Documentation due

CLASS 1 / September 6th: First Day of Class

Introduction, Class Syllabus, Introductions

Assignments: Maker Space Training

CLASS 2 / September 11th: INTRO TO HANDS -ON DESIGN

Introduction Lecture

Assignments: artist/ artwork presentation selection, Maker Space Training

CLASS 3 / September 13th: WORKSHOP 1 – TOOLS + FABRICATION

Intro to tools and methods of making

Assignments: Reading 1, Workshop 1 Ideation Presentation

Deliverables: artist/ artwork presentation sign-up, Maker Space training should be completed

CLASS 4 / September 18th: TOOLS + FABRICATION - IDEATION

Workshop 1 Ideation Presentations

Assignments: Sign-up for 1:1, Prepare work to be discussed on 1:1

Deliverables: Workshop 1 Ideation Presentation

CLASS 5 / September 20th: TOOLS + FABRICATION - WORK SESSION

Reading 1 Discussion / 1:1

Assignments: Workshop 1 Documentation

Deliverables: Reading 1, Progress for 1:1, Artist Presentations

CLASS 6 / September 25th: WORKSHOP 1 REVIEW

Workshop 1 Project Review

Assignments: install software for workshop 2

Deliverables: Workshop 1 Documentation

CLASS 7/ September 27th: WORKSHOP 2 – 2D DESIGN + FABRICATION

Intro to 2d design with Photoshop, Illustrator and Rhino.

Assignments: Reading 2, Workshop 2 Ideation Presentation

Deliverables: install software for workshop

CLASS 8 / October 2nd: 2D DESIGN + FABRICATION - IDEATION

Workshop 2 Ideation Presentations

Assignments: Sign-up for 1:1, Prepare work to be discussed on 1:1

Deliverables: Workshop 2 Ideation Presentation

CLASS 9 / October 4th: 2D DESIGN + FABRICATION - WORK SESSION

Reading 2 Discussion / 1:1

Assignments: Workshop 2 Documentation

Deliverables: Reading 2, Progress for 1:1, Artist Presentations

CLASS 10/ October 9th: NO CLASS

Assignments: complete work for Workshop 2 review

Deliverables: none

CLASS 11 / October 10th: WORKSHOP 2 REVIEW

Workshop 2 Project Review

Assignments: install software for workshop 3

Deliverables: Workshop 2 Documentation

CLASS 12 / October 11th: - WORKSHOP 3 - 3D MODELING + FABRICATION

Intro to 3d modeling with Rhino and file preparation for Fabrication.

Assignments: tutorial videos for rhino, Reading 3, Workshop 2 Ideation Presentation

Deliverables: install software for workshop

CLASS 13 / October 16th: 3D MODELING + FABRICATION - IDEATION

Workshop 3 Ideation Presentations

Assignments: Sign-up for 1:1, Prepare work to be discussed on 1:1

Deliverables: Workshop 3 Ideation Presentation

CLASS 14/ October 18th: 3D MODELING + FABRICATION – WORK SESSION

Reading 3 Discussion / 1:1

Assignments: Workshop 3 Documentation

Deliverables: Reading 3, Progress for 1:1, Artist Presentations

CLASS 15 / October 23rd: WORKSHOP 3 REVIEW

Workshop 3 Project Review

Assignments: rest!

Deliverables: Workshop 3 exploration

CLASS 16 / October 25th: INTRO TO FINAL PROJECT

Class lecture

Assignments: Final Project proposal (100 - 200 words), Final Project Proposal Presentation, Reading 4

Deliverables: none

CLASS 17 / October 30th: PROJECT 1 PROPOSALS

Final Project proposal review

Assignments: Sign-up for 1:1, Prepare work to be discussed on 1:1

Deliverables: Project 1 Proposal (100 - 200 words)

CLASS 18 / November 1st: GUEST ARTIST - WORKING SESSION

Artist Talk, Artist Presentations and Desk crits and in-class work session

Assignments: Sign-up for 1:1, Prepare work to be discussed on 1:1

Deliverables: Progress for 1:1, Artist Presentations, Reading 4

CLASS 19/ November 6th: WORKING SESSION

Desk crits and in-class work session

Assignments: Sign-up for 1:1, Prepare work to be discussed on 1:1

Deliverables: Progress for 1:1

CLASS 20/ November 8th: WORKING SESSION

Desk crits and in-class work session

Assignments: Sign-up for 1:1, Prepare work to be discussed on 1:1, Reading 5

Deliverables: Progress for 1:1

CLASS 21 / November 13th: GUEST ARTIST - WORKING SESSION

Artist Talk, and Desk crits and in-class work session

Assignments: Sign-up for Project Progress Review, Prepare Final Project Review presentation, prototype/ w.i.p

Deliverables: Progress for 1:1, Artist Presentations

CLASS 22/ November 15th: FINAL PROJECT PROGRESS REVIEW 1

Review of Final Project progress with guest critics

Assignments: Sign-up for 1:1, Prepare work to be discussed on 1:1

Deliverables: Final Project Progress Review Documentation

CLASS 23/ November 20th: WORKING SESSION

Reading 5 discussion, Artist Presentations, Desk crits and in-class work session

Assignments: Sign-up for 1:1, Prepare work to be discussed on 1:1

Deliverables: Progress for 1, Reading 5

CLASS 24/ November 22nd: NO CLASS

No Class – Holiday Break

Assignments: Sign-up for 1:1, Prepare work to be discussed on 1:1

Deliverables: none

CLASS 25/ November 27th: WORKING SESSION

Desk crits and in-class work session

Assignments: Sign-up for 1:1, Prepare work to be discussed on 1:1, Reading 6

Deliverables: Progress for 1:1

CLASS 26 / November 29th: GUEST ARTIST - WORKING SESSION

Artist Talk, and Desk crits and in-class work session

Assignments: Sign-up for Project Progress Review, Prepare Final Project Review presentation, prototype/ w.i.p

Deliverables: Progress for 1:1, Artist Presentations

CLASS 27/ December 4th: FINAL PROJECT PROGRESS REVIEW 2

Review of Final Project progress with class

Assignments: Sign-up for 1:1, Prepare work to be discussed on 1:1

Deliverables: Final Project Progress Review Documentation

CLASS 28/ December 6th: WORKING SESSION

Reading 6, Artist Presentations and Desk crits and in-class work session

Assignments: Sign-up for 1:1, Prepare work to be discussed on 1:1, Reading 6

Deliverables: Progress for 1:1

CLASS 29/ December 6th: WORKING SESSION

Desk crits and in-class work session

Assignments: Sign-up for Final Project Presentation

Deliverables: Progress for 1:1

CLASS 30 / December 13th: FINAL PROJECT CRIT

Presentation of Final Projects and documentation

Assignments: Class documentation

Deliverables: Final Project Presentation

*****DECEMBER 20TH Final Class Documentation Due *****