

Embodying Code

3016 | Art & Technology Studies | Mondays 9:00AM—4:00PM | 1/26 -5/4 | Maclean 426

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description

This course examines the possibilities of artistic form provided by modern computer-aided design and manufacturing technologies. Students will learn software-based tools such as Rhino3D, a computer aided design (CAD) package, as well as Grasshopper, a graphical algorithm editor tightly integrated with Rhino's modeling tools. Together, these tools afford a powerful modeling environment allowing students to explore generative algorithms, parametric design and the geometric interpretation of data and real-time interactions in the context of creating physical objects. Students will use laser cutters, 3D printers and CNC mills to give these geometric explorations physical form.

objectives/outcomes

- foundation in programming
- projects spanning conceptual and creative ideas.
- ability to integrate multiple digital fabrication techniques in creative process

textbooks

[google.com](https://www.google.com)

supplies

[google.com/chrome/](https://www.google.com/chrome/)

site

embodyingcode.com

evaluation

Participation: Process work, class critiques, class preparedness, attendance and work done in class

schedule

The class schedule is subject to change at the discretion of faculty based on necessary adjustments to specific activities relevant to this course. Updates to the schedule will be shared with the class as appropriate.

Faculty reserve the right to make changes and/or adjustments to the syllabus.

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introductions

review syllabus

overview of course

workshop: Processing

assignment: read A Touch of Code (PDF) and Code as Medium (PDF)

Work on Processing Sketches

2

discussion: Code

demo: i/o lab

workshop: processing

plan **project 1**

3

discussion: pdf

workshop: working physical output in mind

Working with Rhino 3D

assignment: PDF

4

discussion: pdf

workshop: 3D Printing

assignment: PDF

continue working on Project 1

5

project 1: critiques

workshop: 3D Printing

assignment: PDF

project 2: start!

6

discussion of reading

[workshop](#): 3D Scanning

[assignment](#): PDF

7

discussion of reading

[workshop](#): Shapeoko

8

work day

[assignment](#): (pdf)

[project 2](#): critiques

9

discussion: PDF

prepare for final projects

[workshop](#): Grasshopper

[begin final projects](#)

10

[workshop](#): tbd.

[assignment](#): tbd.

11

Advanced Topics

possibilities include working with a Kinect or using OpenFrameworks

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Advanced Topics

possibilities include working with a Kinect or using OpenFrameworks

13

Advanced Topics continued...

14

Final Critiques

15

Final Critiques

Policies

Accommodations for Students with Disabilities:

The School of the Art Institute of Chicago is committed to full compliance with all laws regarding equal opportunities for students with disabilities.