E/H/Art 89 New Media Arts in the 20th and 21st Centuries
Caltech, winter 2014, 9 units (3-0-6)
Wednesdays, 7pm - 10 pm, Kerchoff 101

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Office: Keck 211

COURSE DESCRIPTION:
This course will examine artists' work with new technology, fabrication methods and media from the late
19th Century to the present. Major artists, exhibitions, and writings of the period will be surveyed. While
considering this historical and critical context, students will create their own original new media artworks
using technologies and/or fabrication methods they choose. Possible approaches to projects may involve
robotics, electronics, computer programming, computer graphics, mechanics and other technologies.
Students will be responsible for designing and fabricating their own projects. Topics may include systems
in art, the influence of industrialism, digital art, robotics, telematics, media in performance, interactive
installation art, and technology in public space. Artists studied may include Eadweard Muybridge, Marcel
Duchamp, Vladimir Tatlin, John Cage, Jean Tinguely, Stelarc, Survival Research Laboratories, Lynne
Hershman Leeson, Eduardo Kac, Natalie Jeremenjenko, Heath Bunting, Janet Cardiff and others.

ASSIGMENTS
Weekly Research And Writing
1. Write approximately 500 words in response to the lecture. Essay questions will be provided
   in class. Weekly writing will be turned in for review three times during the semester. You
   will get a single grade for all of your writing at the end of the semester.
2. Additional reading and film/video viewing will be assigned.

Project
Now is your chance to get credit for building that thing you want to bring to Burning Man 2014, the
nonsensical app you've been dreaming of making, the wearable electronic musical instrument you wish
you could play but doesn't yet exist, or otherwise have fun with your technical chops.

Create your own original new media artwork using technologies and/or fabrication methods you choose.
Possible approaches to projects may involve robotics, electronics, computer programming, computer
graphics, mechanics and other technologies. Students will be responsible for designing and fabricating their
own projects.
1. Write an approximately 500 word proposal
2. Create informal design concept sketches
3. Loosely diagram fabrication plans
4. Fabricate project

REQUIRED BOOKS
All assigned reading and other materials are online. The instructor will provide PDFs and web site
addresses each week.

Take notes in class on a spiral-bound notebook.

REQUIRED PROJECT MATERIALS
Students will determine the materials needed for their projects. Students will be responsible for obtaining
their own materials.
GRADES
Grades and Pass/Fail
Your final course grade will be based on the following percentages:

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<thead>
<tr>
<th>Percentage</th>
<th>Component</th>
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<tbody>
<tr>
<td>45</td>
<td>Weekly Writing</td>
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<tr>
<td>45</td>
<td>Project</td>
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<tr>
<td>10</td>
<td>Class Participation</td>
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<td>100</td>
<td>Total</td>
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SCHEDULE (Topics TBC)

1/8       Week 1
Introduction to the class
Lecture/discussion: Forerunners of Media Art: Motion, Time and Space
Homework: Research and writing

1/15      Week 2
Lecture/discussion: Machines and Robots
HW: Research and writing

1/22      Week 3
Lecture/discussion: Prosthetics, Alter Egos and the Body
HW: Research and writing

1/29      Week 4
Lecture/discussion: Systems and Sound
HW: Project proposal: 500 words and concept design sketches due 2/5, project proposal meeting outside of class time

2/5       Week 5
Lecture/discussion: Dada, Media Critique and Tactical Media
HW: Research and writing, project fabrication

2/12      Week 6
Lecture/discussion: Collaborations Between Artists and Scientists, Computer Programming and Art, BioArt
HW: Research and writing, project fabrication

2/19      Week 7
Lecture/discussion: Field Trip?
HW: Research and writing, project fabrication

2/26      Week 8
Lecture/discussion: Work in progress presentations/critiques
HW: Research and writing, project fabrication

3/5       Week 9
Lecture/discussion: Software Or “Generative” Art
HW: Research and writing, project fabrication

3/12      Week 10
Lecture/discussion: Video Game Aesthetics
HW: Complete project and prepare presentation

3/19      Exam Week
Project Presentations