

Title: **Denting the Universe: Creativity and Critique**
Type: IP Course
Course Number: 58277
Section: UNIV 200 07
Times: MWF 2:00-2:52pm
Place: LANG 301 (Gallery Theater) Except as noted below
Instructors: Alan Cheville, Prof. of Electrical and Computer Engineering
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Richard Rinehart, Director, Samek Art Museum
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Video Production: Brianna Derr, Instructional Technology
Teaching Assistant: Laura Libert, Fellow, Samek Art Museum
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Texts: Assigned readings are available either on reserve in the
Bertrand Library or available electronically on the course
Moodle site.

DESCRIPTION

This course is conceived as a dialectic (*i.e the art of investigating or discussing the truth of opinions*) between art and engineering. Following the nature of dialectics or dialogs, the course will present different ways of knowing and doing by asking a set of questions core to the disciplines of art and engineering that are explored from each disciplinary perspective to reveal divergent and convergent answers. The course will first explore the relationships between art and engineering in regards to the people, practices, objects, and spaces of both.

After developing an understanding of the environments in which artists and engineering function, the course will introduce three different perspectives, or lenses, to contrast art and engineering:

- quality (the standard of something as measured against other things of a similar kind)
- epistemology (investigating what distinguishes justified belief from opinion)
- critique (the process of conducting a detailed analysis and assessment)

Following the concept of the dialectic, this course is formatted as a colloquium in which discussion between instructors, students, and visiting speakers aims at truth, or at least understanding. A set of readings is assigned for the first part of the semester to help students gain additional perspectives on what is art and engineering.

In order to explore the perspectives of art and engineering from more than a philosophical perspective teams of students will be assigned an *erstelltartefaktmitsozialerbedeutungundschlag*.

Actually this is a word we made up using Google Translate to turn the phrase "created artifact with social meaning and impact" into German. In thinking about

this class we first used the word “artifact” but this does not capture the depth of meaning we intend adequately. What we are trying to communicate is that each team is assigned a created object that is meant to change the world or dent the universe in some way. Since you might think of your assignment as the hammer wielded to create the dents, we’ll call your assigned artifact Mjölfnir after the hammer of the Norse God Thor.

Each team will critique their Mjölfnir from both artistic and engineering perspectives. Throughout the semester, student teams will collaboratively produce a video that comprises a comprehensive critique of their assigned Mjölfnir, framed by the big questions and conveyed both verbally and materially in the video.

Teams: Class will be divided into approximately 6 teams, assigned by the instructors. Each team will be assigned one reading to present to the class and one art & engineering project to critique in their video.

Grade Determination: 100 points total, 90-100 = A, 80-90 = B, etc.

- Attendance: 20 points
- Participation in riffs and critiques: 25 points
- Reading Summary: 15 points
- Video: 40 points (10 for storyboard, 10 for draft, 20 for final)

Attendance: Students are expected to attend classes and labs. Absences may be excused by contacting the TA in advance.

Participation: To have an effective dialectic requires that you engage with both perspectives- art and engineering. We don’t know where this class will go, but everyone needs to come on the ride. You may participate in two ways:

- 1) participate directly in the riff discussions on stage for a time and write your name in the logbook, or
- 2) post your questions/comments to the class blog on Moodle following the class.

Reading Summary: Each team will present a 15-20 minute critical summary of a reading assignment. The presentation will be scored using the reading rubric available on the Moodle site..

Video: A short (nominally 5-7 minute) video will explore the assigned Mjölfnir from the perspective of both art and engineering. The video should showcase student’s abilities to describe the people, practices, objects, and spaces of the artifact as viewed through the lenses of quality, epistemology, and critique. The video will be produced in three phases: a storyboard (10 points), draft (10 points), and final production (20 points). Videos will be scored using a rubric posted to the course Moodle site at the start of the project. Note that you will receive instructor and peer feedback at several points as you create your video. Also note that reading

summary and video grades may be weighted by any peer evaluations that are conducted.

The final screenings of student videos in week 15 will be open to the public and refreshments will be served. Each team should produce their own poster for their video (during weeks 13 & 14) and place around campus to encourage attendance. Each poster will be required to have text including the time, place, dates, etc. (that will be gone over in class) but design decisions will be left to each group.

CALENDAR (Subject to Change)

Week 1

- Jan 20 Introduction to course and syllabus (Co-Instructors)
- Jan 22 Introduction to digital critique (video production is with Brianna Derr)
Responses to doodle poll due

Week 2

- Jan 25 Riff on People and Practices *iteration, planning* (riffs are with Co-Instructors)
- Jan 27 Class discussion of reading 1 (reading discussions are w/TA)
- Jan 29 Conducting Research-Research Services & Brianna Derr
Project teams assigned

Week 3

- Feb 1 Riff on Spaces
- Feb 3 Class discussion of reading 2
- Feb 5 Video production instruction – Screen capture video clips using iShowU /Oscar Training. *Meet in Bert 018*
Treatment due

Week 4

- Feb 8 Riff on Objects
- Feb 10 Class discussion of reading 3
- Feb 12 Video production instruction – Audio booth training. *Meet in Bert 018*
Treatment Feedback from Profs due/begin script writing for narration

Week 5

- Feb 15 **Teams 1,2,3 present on readings 1,2,3**
- Feb 17 Class discussion of reading 4
- Feb 19 Video production instruction – Storyboard session. *Meet in Bert 025*
Script due

Week 6

- Feb 22 Riff on Critique
- Feb 24 Class discussion of reading 5
- Feb 26 Video production instruction – In class peer review
Recorded narration due
•Script feedback from Profs etc. due•

Week 7

- Feb 29 Riff on Epistemology
- Mar 2 Class discussion of reading 6
- Mar 4 Video Lab - In-class peer review. *Meet in Bert 025*
•Storyboard due•

Week 8

- Mar 7 Riff on Quality
- Mar 9 **Teams 4,5,6 present on readings 4,5,6**
- Mar 11 Editing Session (Final Cut Pro X) *Meet in Bert 018*

Week 9

- Mar 14 Spring Break
- Mar 16 Spring Break
- Mar 18 Spring Break

Week 10

- Mar 21 Riff on art & engineering artifact 1
- Mar 23 Guest Speaker (Marisa Olson)
- Mar 25 Video Lab -Editing working session. *Meet in Bert 018*

Week 11

- Mar 28 **Teams 1,2 present video storyboards, class critique**
- Mar 30 **Teams 3,4 present video storyboards**
- Apr 1 **Teams 5,6 present video storyboards**
Video Production-1 min edit draft due

Week 12

- Apr 4 Riff on art & engineering artifact 2
- Apr 6 Summary of engineering perspective
- Apr 8 Summary of art perspective
Video 1 Final Edit Due

Week 13

- Apr 11 Video lab-Continue editing final film. *Bert 018*
- Apr 13 Video lab-Continue editing final film. *Bert 018*
- Apr 15 Video lab-Continue editing final film. *Bert 018*
Final edit storyboards due

Week 14

- Apr 18 Video lab-Continue editing final film. *Bert 018*
- Apr 20 Video lab-Continue editing final film. *Bert 018*
- Apr 22 Video lab-Continue editing final film. *Bert 018*

Week 15

- Apr 25 Teams 1,2 screen final videos, class critique
- Apr 27 Teams 3,4 screen final videos
- Apr 29 Teams 5,6 screen final videos

Week 16

- May 2 Course Evaluations

Readings

| Topic | Art | Engineering |
|-------------------------|-------------|-------------------------------------|
| 1) People and Practices | Wolff ch. 2 | Bucciarelli ch. 1-2 |
| 2) Spaces | Bennett | Bucciarelli ch. 5 |
| 3) Objects | Benjamin | Bucciarelli ch. 3 Meadows, ch. 1 |
| 4) Critique | Fraser | Kallenberg ch. 5 |
| 5) Epistemology | Goldberg | Weir, ch. 1-4, Goldman |
| 6) Quality | Clark | Pirsig ch. 1-6 |

Texts and Readings (on Moodle or on reserve):

- Brad J. Kallenberg, *By Design,- the ethics, theology, and practice of engineering*, Cascade Books, 2013
- Donella H. Meadows, *Thinking in Systems, a primer*, Chelsea Green, 2008
- Louis L. Bucciarelli, *Designing Engineers*, MIT Press, 2002.
- Steven L. Goldman, Why we need a philosophy of engineering, *Interdisciplinary Science Review*, vol. 29, 2004.
- Robert M. Pirsig, *Zen and the Art of Motorcycle Maintenance*, Harper Torch, 2006
- Janet Wolff, *The Social Production of Art*, Macmillan Publisher, 1981
- Andrea Fraser, *From the Critique of Institutions to an Institution of Critique*, ArtForum, 2005

- Ken Goldberg, *The Unique Phenomenon of a Distance*, from The Robot in the Garden: Telerobotics and Telepistemology in the Age of the Internet, MIT Press, 2000
<http://goldberg.berkeley.edu/art/tele/intro.html>
- Tony Bennett, *The Exhibitionary Complex*, New Formations, 1988
<http://www.londonconsortium.com/uploads/The%20Exhibitionary%20Complex.pdf>
- T.J. Clark, *In Defense of Abstract Expressionism*, October, 1994
<http://timothyquigley.net/vcs/clark-abex.pdf>
- Walter Benjamin, *The Work of Art in the Age of Mechanical Reproduction*, 1936
<https://www.marxists.org/reference/subject/philosophy/works/ge/benjamin.htm>
- Nicolas Bourriaud, *Relational Form*, from *Relational Aesthetics*, Le Presse du Reel, 1998
http://www.kim-cohen.com/seth_texts/artmusictheorytexts/Bourriaud%20Relational%20Aesthetics.pdf

Supplementary Texts

- Nigel Cross, *Designerly Ways of Knowing*, Birkhauser, 2007

List of *erstelltartefaktmitsozialerbedeutungundschlag's* or *Mjöltnir's* or **Art & Engineering Artifacts for Video Projects** or **Hammers for Denting the Universe**

- **Ten Thousand Cents**, Aaron Koblin, 2008
 - <http://www.tenthousandcents.com/>
- **Telegarden**, Ken Goldberg, 1995-2004
 - <http://www.ieor.berkeley.edu/~goldberg/garden/Ars/>
- **SSB**, R. Luke DuBois, 2008, *Samek Museum Collection*
 - <http://www.bitforms.com/dubois/ssb>
- **Super Mario Clouds**, Corey Arcangel, 2002
 - <http://www.coryarcangel.com/things-i-made/2002-001-super-mario-clouds>
- **Flame Hurricane**, Survival Research Labs
 - <http://www.srl.org/mach.html>
- **Leviathan, Paris** Anish Kapoor
 - <http://content.time.com/time/photogallery/0,29307,2071451,00.html>
- **Fallen Star**, Do Ho Suh
 - <http://stuartcollection.ucsd.edu/artist/suh.html>
- **Rope Fountain**, Paolo Salvagione
 - <https://www.youtube.com/watch?v=XGHACdmT5TE>
- **Puff**, Karolina Sobecka
 - <http://www.amateurhuman.org/puff-2>

