COURSE DESCRIPTION

Over the past few decades, design has come to pervade nearly all realms of human production, from the infinitesimally small world of molecules and microchips to the immensely vast domains of organizational systems, cities, regions and landscapes. Gone are the days when design was an activity directed primarily at the creation of buildings, decorative objects or consumer products. Indeed, one is as likely to find the work of designers in the immaterial world of digital interfaces and software today, as in the tangible objects of architecture and urban infrastructure. And as genetically modified foods make evident, organic entities have come to be composed and designed just as readily as inanimate objects.

As design historians are quick to remark, design has extended its scope in recent decades, expanding well beyond its traditional aesthetic purview. Design Futures: New York City will explore the field of design in relation to its changing scope, aims and its ever-moving disciplinary boundaries. The organization of the course reflects this premise: the weekly sessions are organized around particular questions and challenges that designers have had to respond to and reckon with over the past century, from the formative pressures exerted by economic markets, social norms and natural resources, to the possibilities occasioned by new developments in digital technologies, robotic fabrication and data visualization techniques.

Designers are not craftsmen; the objects made by their hands are not final products to be enjoyed and consumed by end users, but intervening mediums and representations which can take the form of drawings, models, diagrams, maps and prototypes. In this course we will approach design, not as a domain of expertise or as a discrete form of knowledge, but as a process of mediation between disciplines and epistemologies. At a moment of extreme differentiation and disciplinary specialization, the designer will be seen to possess competencies that cut across disciplinary lines and bring critical visibility to the social and political problems of our day.
COURSE SUMMARY

Week 1    WHAT WAS DESIGN?    Week 8    BIOLOGICAL DESIGN
Week 2    DESIGN FOR DISSENT    Week 9    DATA VISUALIZATION AND SOCIAL JUSTICE
Week 3    DESIGN IN PRINT    Week 10    COMPUTATION AND FABRICATION
Week 4    THE COMMODITY OBJECT    Week 11    INFRASTRUCTURE AND THE CITY
Week 5    design reviews    Week 12    thanksgiving
Week 6    MANUFACTURED LANDSCAPES    Week 13    ECOLOGICAL DESIGN
Week 7    NORMS AND STANDARDS    Week 14    design reviews

COURSE REQUIREMENTS

Prerequisites
This class is open to students at all levels. There are no prerequisites for the class.

Attendance
Attendance to all course meetings is mandatory. An attendance sheet will be distributed at each meeting. Unexcused absences, late arrivals, or early departures from class will reduce your course grade. Three non-consecutive absences will result in a grade reduction by one-third (1/3) of one letter grade (e.g., A- to B+). Three consecutive absences or four non-consecutive absences will adversely affect your final grade.

Absences due to acute illness, a personal crisis (e.g. a death in the family), religious observance, or for other reasons of comparable gravity may be excused. In all such cases, students must promptly email their instructor to communicate the reason for their absence and to arrange an opportunity to review any important information they may have missed. Students who know they will miss one or more scheduled classes due to a religious holiday should contact their instructor during the first week of classes to discuss their anticipated absences.

Readings
There are no textbooks in this class. There will be approximately 20-40 pages of reading a week. The readings will be posted online. All readings must be completed the night before the relevant class.

Materials and Tour Budgets
Students may be required to purchase a few inexpensive materials for the design projects including poster boards and silkscreen panels. Students should budget $30 for such expenses.

There are no entrance fees to the museums we will be visiting but students will be required to pay for public transport for all excursions.

1. Course Assessment and Grading:
   Participation and Attendance: [20%]
   Weekly Reading Responses: [10 summaries x 2 points each = 20%]
   - There are 10 classes in this course that require reading responses. The length of reading responses will be 200-250 word (no less, no more). Use short, succinct sentences.
   - Reading responses are due at midnight the night before each of the relevant classes. Late papers will not be accepted unless a valid reason is accompanied by a note from a doctor or class dean.
   - I will set up online discussion boards on canvas where you will submit your responses. You will be able to see your classmates’ responses only once you have added your own response to the forum. Once you have added your response, I recommend that you read some of the other responses on the forum.
   - Reading Responses should begin by briefly summarizing the main thesis/argument of each reading. You are then asked to relate the theme and arguments elaborated in the reading to a design case study. Some suggested case studies for each week’s theme are listed in the course schedule. You may choose one of the case studies listed or find your own.
   - Reading Responses in note form will not be accepted.
   - Collaboration on the Reading Responses is not allowed. See the The Barnard Honor Code below.

Design Projects: [3 Design Projects x 25% each = 60%]
- You are asked to develop three design projects over the course of the semester.
  - Design Project 1: Designing for Dissent Silkscreen: with text. 2 person collaborations.
  - Design Project 2: Culture Jamming Collage: Individual projects.
  - Design Project 3: The Life (Cycle) of Objects: 4 person collaborations.
- See the course schedule for specific dates and deadlines.
Student Learning Outcomes:
Students who participate fully in the course will:
• Develop a basic understanding of a range of design disciplines
• Develop a basic understanding of the design process as a collaborative endeavor
• Be able to articulate (orally and in writing using both text and images) a cogent position on the design of a product, project, or system
• Be familiar with various designers, design institutions, and design practices in New York City

POLICIES AND STATEMENTS
The Barnard Honor Code:
The Barnard Honor Code applies to all students in this class regardless of academic affiliation. Approved by the student body in 1912 and updated in 2016, the Code states:

We, the students of Barnard College, resolve to uphold the honor of the College by engaging with integrity in all of our academic pursuits. We affirm that academic integrity is the honorable creation and presentation of our own work. We acknowledge that it is our responsibility to seek clarification of proper forms of collaboration and use of academic resources in all assignments or exams. We consider academic integrity to include the proper use and care for all print, electronic, or other academic resources. We will respect the rights of others to engage in pursuit of learning in order to uphold our commitment to honor. We pledge to do all that is in our power to create a spirit of honesty and honor for its own sake.
The Columbia College Honor Code and the Columbia College Faculty Statement on Academic Integrity can be viewed here:
https://www.college.columbia.edu/honorcode
https://www.college.columbia.edu/faculty/resourcesforinstructors/academicintegrity/statement

Barnard Wellness Statement:
It is important for undergraduates to recognize and identify the different pressures, burdens, and stressors you may be facing, whether personal, emotional, physical, financial, mental, or academic. We as a community urge you to make yourself—your own health, sanity, and wellness—your priority throughout this term and your career here. Sleep, exercise, and eating well can all be a part of a healthy regimen to cope with stress. Resources exist to support you in several sectors of your life, and we encourage you to make use of them. Should you have any questions about navigating these resources, please visit these sites:
Barnard Students: https://barnard.edu/wellwoman/about
Columbia Students: http://www.college.columbia.edu/resources Click on Health-Wellness
Columbia GS Students: https://gs.columbia.edu/health-and-wellness
Columbia SEAS Students: http://gradengineering.columbia.edu/campus-resources

Academic Accommodations:
If you are a student with a documented disability and require academic accommodations in this course, you must register with the Office of Disability Services (ODS) for assistance. Students requesting accommodations will need to first meet with an ODS staff member. Once registered, students are required to request accommodation letters each semester to notify faculty. Accommodations are not retroactive, so it is best to contact ODS early each semester to access your accommodations. If you are registered with ODS, please see me to schedule a meeting outside of class in which you can bring me your faculty notification letter and we can discuss your accommodations for this course. Students are not eligible to use their accommodations in this course until they have met with me.
ODS is located in Milbank Hall, Room 009/008. Columbia ODS is located in Wien Hall, Suite 108A.
## CLASS SCHEDULE

### Week 1 (9/7)

**WHAT WAS DESIGN?**

**Intro (1:10-1:30)**
Course and syllabus overview. Introduce Design Center at Barnard.

**Lecture (1:30-2:45)**

**Film (3-4:25)**
*Helvetica*, dir. Gary Hustwit (80 minutes)

**Reading**

**Case Studies**
Peter Behrens, AEG; James Dyson; I love NY; fashion vs design; trend forecast companies, IKEA, Katerina Kamprani, *The Uncomfortable*; Dunne and Raby; Extrapolation Factory . . .

### Week 2 (9/14)

**DESIGN FOR DISSENT**

**Visit (1:10-1:50)**
We’ll explore a collection of rare books with special attention to developments in printing technology, graphic design and typography. Avery Classics, Avery Library, Columbia University.

**Project (2-3)**
Introduce first project: *Designing for Dissent Silkscreen*. Discuss activist poster precedents.

**Visit (3-4:25)**
*Activist New York*, Museum of the City of New York

**Reading**

**Case Studies**
Russian Constructivism; First Things First Manifesto (1964); The Atelier Populaire; See Red Women’s Workshop; The Poster Workshop; Banksy; ACT UP; Barbara Kruger; PETA; Jonathan Barnbrook . . .

### Week 3 (9/21)

**DESIGN IN PRINT**

**Guest Lecture (10:30-12)**

**Project (1:10-1:40)**
**WORKSHOP:** Barnard Design Center Safety Training
Barnard Design Center Silkscreen Workshop

**Reading**

**Case Studies**
Italian Futurism; El Lissitzky; G magazine; Dada Collage; Bauhaus graphic design and typography; Paul Renner; Max Bill; Karl Gerstner; Tibor Kalman + Benetton; Bruce Mau, Life Style . . .
Week 4 (9/28)

Lecture (1:10-2)

Project (2-3)
Discuss readings and progress on design project

Visit (3-4:25)
Mark Eggert, Vice President, Design & Advanced Concepts, FILA Sneaker Design Studio

Readings

Case Studies

Week 5 (10/5)

DESIGN REVIEWS

Visit (1:10-2)
Tour of the Glicker-Milstein Black Box Theatre, Barnard College

Project (2:30-4)
DESIGN REVIEWS: First Project / Designing for Dissent Silkscreens
Introduce Second Design Project: Culture Jamming Collage

Week 6 (10/12)

MANUFACTURED LANDSCAPES

Lecture (1:10-2)
Visit to Freshkills Park, Staten Island

Reading

Case Studies
Edward Burtynsky, Manufactured Landscapes; Ian McHarg, Robert Irwin, Field Operations and Diller and Scofidio, the High Line; Downsview Park Competition; Fresh Kills Competition; Weiss/Manfredi, Olympic Sculpture Park, Scape / Kate Orff . . .

Week 7 (10/19)

NORMS AND STANDARDS

Wed. 10/17 6:30pm
GUEST LECTURE: Joel Sanders: Stalled! a research initiative on inclusive public restrooms

Lecture (1:10-2:30)

Visit (3-4:25)
Heavenly Bodies: Fashion and the Catholic Imagination, Metropolitan Museum of Art

Reading

Case Studies
Henry Dreyfuss, Joe and Josephine; Le Corbusier, Modulor; Seagrams Building; S,M,L,XL; Lucia Cuba, ARTICULO 6 . . .
**Week 8 (10/26)**

**BIOLOGICAL DESIGN**

Visit (1:10-4:25)  
*GenSpace, Sunset Park, Brooklyn.*

Reading  

Case Studies  
Aranda/Lasch, Patrick Schumacher, Karl Chu, Sabin+Jones Lab Studio, Neri Oxman, Achim Menges, Michael Weinstock; Design and the Elastic Mind exhibit, MoMA . . .

**Week 9 (11/2)**

**DATA VISUALIZATION AND SOCIAL JUSTICE**

Lecture (1:10-2:30)  
Juan Francisco Saldarriaga, Senior Data & Design Researcher, Brown Institute for Media Innovation, Columbia University.

Project (2:30-4)  
(4-4:25)  
**DESIGN REVIEWS:** Second Project / Culture Jamming Collage  
Introduce Third Design Project: The Life (Cycle) of Objects

Reading  
+  

Case Studies  
London Poverty Maps; Charles and Ray Eames, “Power of Ten”; Nicolas Schöffer, The Cybernetic City; Venturi, Scott Brown, Izenour: *Learning from Las Vegas*; Mark Lombardi; C. Ratti, SENSEable City Laboratory; Laura Kurgan, Million Dollar Blocks; NY Subway maps, Forensic architecture . . .

**Week 10 (11/9)**

**COMPUTATION AND FABRICATION**

Lecture (1:10-2:30)  
[ History of computation: looms, Charles Babbage, mechanical computing. Shift from mechanical to electronic: “the control room,” Buckminster fuller, networks, miniaturization, the internet of things, rapid prototyping, digital fabrication, robots and 3D printers ]

Reading  

Visit (2:30-4:25)  
*Situ Studio,* Brooklyn Navy Yard

Case Studies  
Eliot Noyes, IBM; Charles and Ray Eames; Greg Lynn, Embryonic House; Foreign Office Architects, Yokahama Ferry Terminal; Zaha Hadid; Gramazio/Kohler, Structural Oscillation House; Michael Hansmeyer, Subdivided Columns . . .

**Week 11 (11/16)**

**INFRASTRUCTURE AND THE CITY**

Guest Lecture (1:10-2:30)  
Tobias Armborst, principal and co-founder, *Interboro*

Readings  
Margaret Crawford, excerpts from *Everyday Urbanism,* in *The Urban Design Reader,* Michael Larice and Elizabeth Macdonald eds. (Taylor and Francis, 2013), 344-357.

Project (2:30-4:25)  
**WORKSHOP:** Third Project: The Life (Cycle) of Objects

Case Studies  
Uneven Growth, Exhibit, MoMA; Teddy Cruz; Mimi Zeiger, “The Interventionist's Toolkit . . .
| Week 12 (11/23) | NO CLASS  
(Thanksgiving Break) |
|------------------|------------------------|
| Week 13 (11/30) | **ECOLOGICAL DESIGN**  
Lecture: [Architecture’s contribution to Ecological Crisis; the rise of ecological consciousness: closed systems ecology, steady state ecology, appropriate technologies movement, high tech, passive housing, contemporary approaches]  
Watch: Annie Leonard, *The Story of Stuff* (20 minutes)  
[https://storyofstuff.org/movies/story-of-stuff/](https://storyofstuff.org/movies/story-of-stuff/)  
| Week 14 (12/7) | **FINAL DESIGN REVIEWS**  
Project (1:10-4:25): **DESIGN REVIEWS:** Third Project: *The Life (Cycle) of Objects* |
ADDITIONAL READINGS + MEDIA

WHAT WAS DESIGN?
• Avery Library, Catalogue of the Andrew Alpern collection of drawing instruments (NY: W.W. Norton, 2010).
• https://99percentinvisible.org/episode/the-trend-forecast/
• Extrapolation Factory, lecture: https://vimeo.com/165357320

DESIGN FOR DISSENT

DESIGN IN PRINT
• Keller Easterling, The Action is the Form: Victor Hugo’s TED Talk (Strelka Press, 2014)

THE COMMODITY OBJECT
• Roy Sheldon, Egmont Arens, Consumer Engineering: A New Technique for Prosperity
• Victor Lebow, Price Competition in 1955
• Noami Klein, No Logo
• Langston Winner, “Do Artifacts Have Politics?”
• Alison Gill, “Sneakers,” in Earnest Elmo Calkins’ “What Consumer Engineering Really Is” (1932)
• Kalle Lasn, Culture Jam: How to Reverse America’s Suicidal Consumer Binge-And Why We Must (William Morrow, 2000).

MANUFACTURED LANDSCAPES
• Clarence J. Glacken, “Reflections of the History of Western Attitudes to Nature,” GeoJournal 26, no. 2 (1992), 103-111.
• Deborah Gans and Claire Weisz, Extreme Sites: The ‘Greening’ of Brownfield (Academy Press, 2004).
• Mohsen Mostafavi with Gareth Doherty, eds. Ecological Urbanism (Baden, Switzerland: Lars Müller, c2010).

NORMS AND NON-COMFORMITY
• Ceci Canli, “Design History Interrupted: A Queer-Feminist Perspective,” in The Responsible Object
• Ellen Lupton, Beautiful Users: Designing for People (New York: Princeton Architectural Press, 2014). [online]
• https://99percentinvisible.org/episode/on-average/

BIOLUMINOUS DESIGN
• Antoine Picon, "Animation to Algorithmics," in Digital Culture in Architecture (Basel: Birkhäuser, 2010), 94-100.

DATA VISUALIZATION AND SOCIAL JUSTICE
• Cynthia E. Smith, Design with the Other 90%: Cities (Cooper Hewitt, 2011).
• Cynthia E. Smith, Design For The Other 90% (Editions Assouline: 2007).
• Janet Abrams & Peter Hall, eds., Else/where: Mapping New Cartographies of Networks and Territories (Minneapolis: University of Minnesota Design Institute, 2006).
• MIT Center for Civic Media: https://www.media.mit.edu/groups/civic-media/overview/
• Center for Spatial Research at Columbia University: http://c4sr.columbia.edu
• Greenpeace, Orizon Project: https://orizon.immo
• Forensic Architecture: https://www.forensic-architecture.org

COMPUTATION AND FABRICATION

INFRASTRUCTURE AND THE CITY

ECOLOGICAL DESIGN
• Ann Thorpe, “Design’s Role in Sustainable Consumption,” Design Issues 26, no. 2 (Spring 2010), 3-16.
• Richard Buckminster Fuller, Operating Manual for Spaceship Earth (1968) (Lars Muller, 2008).
• E.F. Schumacher, Small Is Beautiful: Economics as if People Mattered (Harper Perennial; Reprint edition, 2010).