

Design Research

ARCH/LAAR 64150 (Course # 56911)

Tuesdays 1-3:50pm, Spitzer Room: (AR) 2M11B

Fall 2014, 9.2.2014 - 12.16, 2014

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Digging into Environmental-Cultural-Archival-Bureaucratic-Resource Research: (a.k.a. A Field Guide to Shred)

Burnett, D. Graham, et. al. "The Memory Hole Has Teeth." *Cabinet Magazine*, summer 2011, 76-77.

Project Description

Design Research is a 3 credit fall course. As a seminar focused on research and methodology, it is offered for Masters students in their final year as preparation for the Comprehensive Studio and primer for independent, professional research and inquiry. Embracing the overarching mission of landscape architecture (to prepare students to design environmentally and socially vibrant landscapes for/spaces within twenty-first century cities) it introduces students to fundamental design-research processes, methods, and mechanisms. From the pragmatic processes of archival exploration and literature review to playful prototype testing, it provides skills essential to accomplishing in-depth inquiry (and thus critical design) in landscape architecture.

Although the course is a reading and discussion oriented seminar, it does not focus on essay-oriented research outcomes or a continuous project with Comprehensive Studio. Instead, the course acts as theoretical and conceptual preparation by emphasizing the critical and speculative use of familiar design tools and technologies for engaging with historical, social, environmental, and policy problematics/materials. Along with original archival and field research, students will thus draw upon their backgrounds in spatial modeling,

graphic communication, typological/temporal scenario creation, and supplemental writing to develop a 'constellation' of responses to an independent research proposition.

With method modules (after week 4), the course guides students through the process of research, testing, and supporting their assertions in a variety of media. While the students will develop individual trajectories, a mixture of course readings, professor and group feedback, and in-class exercises are designed to enable them to situate their work amidst both contemporary landscape praxis and larger cultural contexts. Basic research skills (literature reviews, bibliographic referencing and metadata handling, etc.) will be covered aside the pragmatic and organizational tactics necessary for engaging in original research. In addition to humanities fundamentals, the course will focus on the critical and generative potential to be found in rigorous documentary methods (social sciences and design), material experimentation and extrapolation (environmental sciences and policy) and communicative translations (advocacy and institutional perspectives).

Methodology

This course is based on a seminar/discussion format with in-class group exercises and readings. Outside of class session, students will engage in archival and site visits, interviews and field documentation. Students will be expected to participate in class discussion, group presentation exercises and, independently, complete a constellation of research exercises to develop a multifaceted and nuanced thesis (graphic, material, & written) on their chosen landscape inquiry.

The goal of the course is not to create a seamless and polished project, but rather for students to explore how research methods impact results; prototypes, drafts, and mock-up tests (as means of asserting/explicating assumptions and developing scalable arguments) are expected of the independent portion of each method module. In advance of the final collation of their research excursions, students will chose one module for full resolution.

Public feedback on assignments, through peer and group critique, will occur at mid-term and finals. At these reviews, students will present their work both visually (in two dimensions) and verbally in order to generate a discussion of the ideas present in the work. Requirements for each of the weekly assignments will be distributed in class and available on the website. Weekly briefs will define the expectations for the course submissions and blog postings. Deviations from required formats and/or lateness will affect submission grades.

Educational Goals

As the only required methods course for landscape students, Design Research provides basic research conventions and formatting experience, key methodological precedents, and a critical awareness of the use of spatial design tools in independent, cultural inquiry. In lieu of essay writing, students will actively, critically explore the relationship between audience, media, method, and content in landscape research.

Educational goals in this course include the development of the following list of skills and concepts:

- Generalist literacy
- Critical Thinking
- Original Research Experience
- Methodological Options & Constraints
- Visual / Written communication

Learning Objectives

The learning objectives of Design Research are developed from the above educational goals, and include the following actions and activities through which these specific skills and concepts are conveyed to the student.

- **Generalist literacy** is developed through assigned secondary research, literature reviews, abstract exposure, and, in-class, analytic engagement with research precedents and peer work, including reference and citation conventions from both the humanities and sciences, exploration of 'design' translations and interpretations of policy and environmental white papers, and the use basic research guides.
- **Critical thinking** is enhanced through the iterative development, adaptation, and revision of the students' guiding topic 'problematization' based on alternate audiences and media of communication; this should cultivate precise thinking, thoughtful editorial choices, and the intelligent establishment of visual/verbal arguments suited to different ends.
- **Original Research Experience** is developed through archival assignments, institutional visits, and live/phone interviews, followed by the process of documentary collation, analysis, and synthesis. This pragmatic exposure should expose students to a) the typically iterative, multi-site nature of archival and original research and thus b) help them pragmatically organize their materials and time when considering a research project by c) strategically balancing secondary and primary sources.
- **Methodological Options & Constraints** are developed through the 'methods modules,' as students reading about and then complete short tests of different approaches to their inquiry. Reference texts will introduce the conventions and procedures associated with each type, while first hand-experience should enable students to judge both the pragmatic constraints (time, alliances, etc.) and appropriateness of potential outcomes to their core inquiry, suggesting the strategic priority of certain methods over others.
- **Visual/Written Communication** is enhanced through the critical use of the tools of spatial and temporal representation, including drawing and modeling (digital and manual), as part of the analytic and synthetic exploration of cultural-material phenomena and objects.

Schedule

General Overview

- **Weeks 1-4 Phase I Defining/Problematizing a Topic and Planning a Project**
 1. The Craft of Design Research (Introduction to Research)
 2. Finding & Making Disciplinary Problems (Problematization)
 3. Demarcating a Field (Literature Reviews and Orienting Problems)
 4. Proposal Workshop / Research Planning (pragmatics of research, strategy & process)
- **Weeks 5-7 Phase II Methods: Archival to Spatial (Material Culture & Interpretive Maps)**
 4. Making Things Talk I (Interpreting Objects & Formed Matter)
 5. Making Things Talk II (Visual Analysis & Making Measures)
 6. Mid-Term Review (Feedback on Archival Components & Overarching Outline)
- **Weeks 8-10 Phase III Methods: Audience to Advocacy (Ethnography to Advocacy)**
 7. Making & Talking I (Ethnography & 'Action' Research)
 8. Making & Talking II (Policy, Code & Governmentality)
 9. Making & Talking III (Institutions, Externalities, & Agency)
- **Weeks 11-12 Phase IV Methods: Policy to Protocol (Code, Metrics, & Scenarios)**

11. Things That Talk I (Scientific Literacy, Field & Lab Procedures)
12. Things That Talk II (Analog Experiments & Scenarios)
- **Week 13-15 Phase V Methods, Finals: Experiments to Extrapolations (Lab & Field Works)**
 13. *Individual Conferences/Work Session (refine, synthesize, emphasize...)*
 14. *Group Workshop (directed, peer feedback, process strategies...)*
15. Final Presentations

Reference Texts

Most weeks will include specific excerpts, to be either read in class or read between classes, to aid with assignments and discussion. There are also two reference texts that we will refer to which provide a schematic outline of the research process a) more generally and b) within landscape architecture. It is recommended that you skim specific chapters each week or pull them out when you feel uncertain of the next research/writing/drawing step. You are not required to purchase either (pdf's will be posted on the website).

a) Booth, Wayne C., Gregory G. Colomb, and Joseph M. Williams. *The Craft of Research, Third Edition*. University of Chicago Press, 2009.

b) Deming, M. Elen, and Simon Swaffield. *Landscape Architectural Research: Inquiry, Strategy, Design*. John Wiley & Sons, 2011.

Class by Class

09.02 (wk 1) The Craft of Design Research

- *introduction to the course, projects and expectations;*
- *overlaps and divergences with humanities, social sciences, and natural sciences research;*
- *audience, argument, communicative means & ends;*
- *pragmatics: setting up their semester documentation on the webpage/blog;*

in class excerpts (pdf's on web for reference):

Meyer, Elizabeth. "The expanded field of landscape architecture." *Ecological Design and Planning*(1997): 45-79.

Wright, Gwendolyn. "Cultural History: Europeans, Americans, and the Meanings of Space." *Journal of the Society of Architectural Historians* 64, no. 4 (December 1, 2005): 436-40. [full read or below]

Michel Foucault. "Polemics, Politics, and Problemizations: An Interview" in *The Foucault Reader*.ed. Paul Rabinow. New York: Pantheon Books, 1984. 381-90.

Bruno Latour. Short selections on object-agency and social construction from in *Reassembling the Social an Introduction to Actor-network-theory*. Oxford ; New York: Oxford University Press, 2005. 21-25, 63-93. [small sections]

- **Readings:**

Audience & Argument Reference Reading (skim only):

Booth. "connecting with your readers" chapter 2, 16-28; "making good arguments" chapter 7, 108-119
Deming. "knowing landscape architecture" chapter 2, 17-29

Assignment Reading (Group Homework for Presentation):*

**(This week's reading will follow class, but all other weeks should be done in advance)*

Thomas Thwaites. "Preface," "Deconstruction," "Steel" in *The Toaster Project: Or a Heroic Attempt to Build a Simple Electric Appliance from Scratch. First Edition edition*. New York: Princeton Architectural Press, 2011. 1-92 (quick, easy read).

"CUP: Making Policy Public (Download), Vendor Power." <http://www.welcometocup.org/Store>.

David Garcia Studio. "MAP 002 QUARANTINE." *MAP*.

<http://davidgarciastudiomap.blogspot.com/2009/03/david-garcia-studio-launched-map-002.html>.

Eames. *View from the People Wall*, 2013. http://www.youtube.com/watch?v=M6BA4baRcVo&feature=youtube_gdata_player.

Assignment 1: Group Project Analysis/Presentation

Refer to assigned text above and see assignment brief (to be distributed in class)

9.09 (wk 2) Finding & Making Disciplinary Problems

- *instead of general topics, define/find acute problems and their systemic impacts;*
- *where to start - local, habitual, disciplinary instruments/objects (beyond binary crises);*
- *pragmatic research staging- iterative planning, rigorous documentation, & articulate extractions/extrapolations*

in class excerpts (pdf's on web for reference):

Thomas van Leeuwen. "Iron Ivy." *Cabinet Magazine*, #32, 2008.

<http://www.cabinetmagazine.org/issues/32/vanleeuwen.php>

Kroessler, Jeffrey et. al. *Odd Lots: Revisiting Gordon Matta-Clark's Fake Estates*. New York: Cabinet Books/The Queens Museum of Art/ White Columns, 2005.

Nicholas de Monchaux. *Local Code / Real Estates*, 2009. <https://vimeo.com/8080630>.

• **Readings:**

Assignment Reading (Background/Prior to Discussion):

"Reading Effectively - Words in Space."

<http://www.wordsinspace.net/wordpress/teaching/student-resources-2/reading-effectively/>.

Booth. "From Topics... to Problems" Chapter 3-5, 29-66

Deming. "mapping the terrain"+ in Chapter 1, Chapter 4, 7-14, 48-62

Explore archive list to help kickstart problem formulation (see below, end of syllabus)

Assignment 2: Archives & Outreach Selection, Topic Statement/Problem & Field Formulation

Refer to assigned text above and see assignment brief (to be distributed in class)

9.16 (wk 3) Demarcating a Field (Travel Week, Lighter Load)

- *larger methodological trajectory of course (planning, methods: each with documentary & speculative spatio-temporal translations);*
- *basics of secondary source research & primary (archival) pragmatics;*
- *record keeping*

in class excerpts (pdf's on web for reference):

Mumford, Lewis. *Technics and Civilization*. University of Chicago Press, 2010. 1-31 [smaller excerpt from "Preconditions"]
Burnett, D. Graham, et. al. "The Memory Hole Has Teeth." *Cabinet Magazine*, summer 2011.

- **Readings:**

Assignment Reading (Background/Prior to Discussion):

Cornell's Olin & Uris Libraries, "The Seven Steps of the Research Process"
<http://guides.library.cornell.edu/sevensteps>

Deming. "classification schemes" Chapter 8, 126-143

Begin bibliographic reading and annotation (find your own texts...)

Assignment 3: Annotated Bibliography (and Biblio Aide), Archive Scheduling

Refer to assigned text above and see assignment brief (to be distributed in class)

9.23 (wk 4) Proposal Workshop / Research Planning

- *pragmatic parameters in planning a project;*
- *using collaboration to refine aspirations and structure funding;*
- *considering methods' timing/triangulation and documentation*

in class excerpts (pdf's on web for reference):

Project planning samples

Meg Studer's *Aerial Arts* (research/exhibit) background prep, proposals, planning documents.
Sarah McQueen's "Electric L.A." (infographic essay) Recalibrating Infrastructure seminar submission.

- **Readings:**

Assignment Reading & Research Organization 2:

Martin, Bella. *Miscellaneous Concept Diagramming Exercises in Universal Methods of Design*. Rockport Publishers, 2012.

Booth. "Planning" Chapter 12, 171-186.

Deming. "Integrating Design and Research" Chapter 4, 48-62.

Continue bibliography;

Engage with Archives (begin visits)

Assignment 4: Concept-Diagram/Research Process Map, File Management Systems
Refer to assigned text above, see assignment brief (to be distributed in class)

The Path(s) from Sources to Socio-Spatial Speculation - Interpretive Excavations :

9.30 (wk 5) Making Things Talk I (Interpreting Objects & Formed Matter):

- *empirical, formal, and historical challenges of documentary description and analysis;*
- *within the interpretative tradition- moving from single objects & case to surrounding (mass) systems (narratives, series, scales required- multiple scales/registers/mediums/iterations);*

in class excerpts [material cultures]:

Corner, James. *Taking Measures Across the American Landscape*. New Haven; London: Yale University Press, Introduction & Select Images/Diagrams.

Nye, David E. *Narratives and Spaces: Technology and the Construction of American Culture*. Columbia University Press, 1997. Niagara 1-30.

Readings:

Assignment Reading on Material Culture Methods:

Schlereth, Thomas J. *Material Culture: A Research Guide*. University Press of Kansas, 1985. 1-30

Francis. "Case Study Method (LA Journal Summary)" *LA Journal*, 20 (n.d.).

Deming. "complex description" & case studies Chapter 5, 77-84.

continue bibliography and archive exploration (find your own texts...)

Assignment 5: Research Calendar, Methods, and Expert's Statement

See assignment brief (to be distributed in class)

10.07 (wk 6) Making Things Talk II (Visual Analysis & Making Measures)

- *primary, synthetic, speculative research- registering different types of claims visually;*
- *genres of visual output- mediums/manifestations of research;*

in class excerpts [measures & mapping culture(s)]:

Anu Mathu and Dillip Da Cunha. "Basin," in *Mississippi Floods*. New Haven, CT: Yale U. Press, 2001. 11-30+. [text/image excerpts, synthesis & limiting structures]

Kawano, Yoh. "Humanities in the Digital Humanities" *HyperCities: Thick Mapping in the Digital Humanities*. Cambridge, Massachusetts: Harvard University Press, 2014. [breadth & array, graphic/mensurable limitations]

Drucker, Johanna. "...Visualizing Interpretation" *Graphesis: Visual Forms of Knowledge Production*. Cambridge, Massachusetts: Harvard University Press, 2014. 65-137 (selections)

Yeoh, Brenda S. A. *Contesting Space in Colonial Singapore: Power Relations and the Urban Built Environment*. Singapore: Singapore University Press, 2003. [archival samples for argument alteration]

Readings:

Assignment Reading (skim to balance with Archival Work)*:

* Future production weeks won't have outside readings

Deming. "Design operations..." Chapter 12, 209-221.

continue bibliography, continue drafting up archival finds

Assignment 6: Draft Board from larger Project Outline (Text and Images)

See assignment brief (to be distributed in class)

10.14 (wk 7) Mid-Term Review

- *project review of draft sample (argument and research), over-arching problem statement and storyboard frameworks;*
- *ways to balance graphic argument and key captions, references [conceptually, visually]; drafting and revision cycles/strategies;*
- *workshopping partner selections*

Readings:

Assignment Readings (skim if stuck, focus should be on Midterm production):

Booth. "Revising" chapter 13/14, 199-211.

Deming. chapter 4, review...

Assignment 7: Review Write-Up & Biblio Revisions, Finalize

See assignment brief (to be distributed in class)

Office hours check-in: confirm research methods & production schedule

The Path(s) from Audience to Advocacy - Instrumental Outreach & Policy Interventions:**10.21 (wk 08) Talking & Making I (Ethnography & 'Action' Research)**

- *analysis as/with engagement - visual & verbal documentation, virtual surveys, pedagogic games, prototype testing;*
- *cyclic processes and empowerment;*
- *institutional pursuit and partnering;*

in class excerpts [range of engagement agenda's, ideas of activation]:

Borasi, Giovanna, and Mirko Zardini. *Actions: What You Can Do With the City*. Montréal: Sun Publishers, 2008.

Penin, Lara, Eduardo Staszowski, and Cameron Tonkinwise. "Design and Social Innovation in the US. Amplifying Creative Communities in NYC." In *Proceedings of the 2nd International Symposium on Sustainable Design*, 2009.
CUP/Envisioning Development Books & Toolkits. "What is Affordable Housing?" or "What is Zoning?" Booklets/Toolkits/Worksheets.

Readings:

Assignment reading:

Public Ethnography: Making Research Popular, 2013. <http://vimeo.com/61066384>.
Martin, Bella. *Miscellaneous Prototyping and User Testing/Design Scenarios in Universal Methods of Design*. Rockport Publishers, 2012.
Deming. "engaged action research" Chapter 11, 192-204.

Assignment 8: Agency/Outreach Organization Interviews or Activity Participation
See assignment brief (to be distributed in class)

10.28 (wk 09) Talking & Making II (Policy, Code, & Metrics)

- *measures & action at a distance, distributed;*
- *overlapping governmental structures, enforcement & incentives (strategies as they meet w/ contemporary urbanisms, environmental accounting);*
- *pragmatic routes to generalist engagement and literacy (white papers, think tanks, standards booklets)*

in class excerpts:

MVRDV. *Metacity/Datatown*. Rotterdam: 010 Uitgeverij, 1999. (sections)
InfraNet Lab, Lateral Office. *Coupling: Strategies for Infrastructural Opportunism*. New York: Princeton Architectural Press, 2011. [Keller protocols, exercise in alternate engagements]
Jack, B. K., C. Kousky, and K. E. Sims (2008). "Designing Payments for Ecosystem Services: Lessons from Previous Experience with Incentive-based Mechanisms." *Proceedings of the National Academy of Sciences*. 105(28): 9465-9470.
Policy Booklet tbd.

Readings:

Assignment Reading:

Foucault, Michel "Governmentality" in the *Foucault Effect* ed. Burchell, Graham, Colin Gordon, and Peter Miller. Chicago: University Of Chicago Press, 1991. 87-104. (selections)
Deming. "evaluation and rubrics," "logical systems" chp 10, 13 p174-190, 223-234 [skim]

Assignment 9: Norms, Standards & Metrics/Protocol Research
See assignment brief (to be distributed in class)

11.04 (wk 10) Talking & Making III (Data, Ethics, and Externalities)

- *Social Research and Design sampling, strategy, and 'publics;'*
- *Governmental frameworks to governmental 'data' issues and tools:*

- *Externalities, extrapolation, and audience in scenarios & modeling;*

in class excerpts [documents & outreach materials]:

'Monsanto' PR analysis videos

Gillian Rose, "Discourse Analysis I" In Visual Methodologies (London: Sage, 2001): 135-50x.

Hardin, Garrett. 1968, Dec. 13. "The Tragedy of the Commons" in *Science*, New Series, Vol. 162, No. 3859, pp. 1243-1248 [commons, intersect of history of science/soc/environ]

John Carey, "THE ENERGY EFFICIENCY CATCH-22", *Conservation*. Fall 2011.

<http://conservationmagazine.org/2011/09/the-efficiency-catch-22/>

Assignment Reading:

None. Technical guidance as needed.

Assignment 10: Games or Scenarios Framework (Activity Prototype or Metric Proposal)

See assignment brief (to be distributed in class)

You should finalize these materials across two + weeks (10 -11)

The Path(s) from Experiment to Ecological Dynamics - Analog Scenarios:

11.11 (wk 11) Things that Talk I (Scientific Literacy, Field & Lab Procedures)

- *producing 'science' and exhibiting 'science' (and the grey between);*
- *orienting amidst ecological, climatological, geological, etc. landscape territories;*
- *pragmatic routes to generalist engagement and literacy (Nature or Science abstracts, etc.)*

in class excerpts:

Daston, Lorraine. *Histories of Scientific Observation*. Chicago; London: University Of Chicago Press, 2011. or a subset from Galison, Peter. *Objectivity*. New York; Cambridge, Mass.: Zone Books, 2010. (selections).

Odum, Howard T. 1973. "Energy, Ecology, and Economics" in *Energy in Society: A Special Issue*, Allen Press: Royal Swedish Acad of Sci, *Ambio* Vol. 2, No. 6 pp. 220-227 (selections)

Recent Abstracts from *Nature* (tbd.)

Readings:

Assignment Reading:

Latour, Bruno. *We Have Never Been Modern*. 1st edition. Cambridge, Mass: Harvard University Press, 1993. [introduction, lab leaps as opening and omission]

Sverker Sörlin. "Preservation in the Age of Entanglement: STS and the History of Future Urban Nature" in Jorgensen(s), Prichard in *New Natures: Joining Environmental History with Science and Technology Studies*. 1 edition. Pittsburgh: University of Pittsburgh Press, 2013. 212-225.

Deming. "observation" and "experimental strategies" Chapter 5, 7, 66-71, 114-124. "modeling..." Chapter 6, 78-110 [skim]

Assignment 11: Abstract Excavations/Triangulations (your ecologies/issues)

See assignment brief (to be distributed in class)

11.18 (wk 12) Things that Talk II (Analog Experiments & Extrapolations)

- *diy field documentation (collecting cubic meters, forestry spot checks, misc. citizen science);*
- *modeling forces and flows (figuring fluid/thermo dynamics to indexical documentation);*
- *scenario and systems modeling in & outside the computer*

in class excerpts [...moving back and forth in scales, inquiry, assemblage]:

Rahm, Philippe. *Environ(ne)ment: Approaches for Tomorrow*. Bilingual edition. Milano : Montréal : New York: Skira, 2007. [excerpt tbd].

Reynolds, Ann. "Reproducing Nature: The Museum of Natural History as Nonsite." *October* 45 (1988): 109. [collection & exhibition]

various citizen science resource (non-design)

<http://www.birds.cornell.edu/citscitoolkit/toolkit/manual>,

<http://www.citizensciencecenter.com/>, <http://publiclab.org/>, etc. (potential sensing discussion)

other- references to come (models and dynamics)

Readings:

Assignment Reading:

None, focus on assignment, refer back to wk 11 readings

Assignment 12: Analog Experiments & Extrapolations (of your abstract research)

See assignment brief (to be distributed in class)

You should finalize these materials across two + weeks (12-13)

11.25 (wk 13) Working Session

- in advance of final review, students will schedule to meet with the professor to discuss which element/method (archival, advocacy/policy, material systems) they intend to refine;
- *Class is to be used to chance to catch-up on revisions, reading, technical questions before final production push....*

12.02 (wk 14) Group Workshop/Review Prep

- *students will work in small groups (4 per group) based on their revision concentration or methods chosen (technical and conceptual peer feedback, production strategy advice)*
- ***bring drafts a) of 'constellation' documentation (general tests) and b) 70% revision of game/board/booklet (etc.) of chosen exercise***

Project Presentations :

12.09 (wk 15) Final Presentation

Grading & Academic Conduct

I. Grading Breakdown

Grading for the class will be determined according to the following criteria:

- Planning & Research Prep Assignments:
 - 1-4 (Problems & Field Establishment) **5% each, 20% total**
- Method Assignments:
 - 5-6 (Archives), 8-10 (Advocacy/Policy), 11-12 (Materials) **17% each, 51% total**
- Research Consolidation & Revisions:
 - 7,12,13 (Review Revisions, Advising Sessions) **19%***

*Documentation is expected throughout
Packaged copies will be due by the 19th and failure to submit will effect entire grade

- Attendance and Participation **10%**

II. **Incompletes:** There will be no Incomplete given for a course except for a documented medical excuse at the discretion of the instructor. You are required to attend all classes and be present in the studio during the allocated times. Absence need to be notified as mentioned in the paragraph above in schedule.

III. **Attendance and timely submission of assignments:** More than TWO unexcused absences will result in a failing grade. Late assignments (for pinup or review) will not be reviewed for a grade. Each student must post what is completed or receive a failing grade for the particular assignment. Names of groups and individuals should be clearly indicated on all assignments.

IV. Grading Standards

This schedule conforms to CCNY 2008-2010 Graduate Bulletin:

Grade	Explanation (refers to class performance)	Quality Points
A+	Rare, near perfect achievement	4.00
A	Exceptional	4.00
A-	Excellent	3.70
B+	High caliber	3.30
B	Satisfactory	3.00
B-	Below average	2.70
C+	Not satisfactory	2.30
C	Poor	2.00
F	Course failure	0.00

V. Reading List

See weekly bibliographies

VI. Archival/Institutional List

Students will pick from the following sites in developing their research:

(first 16 will be assigned for weeks 5-6, remainder are for supplemental activities & inquires)

1. morgan library
2. nypl (all branches)
3. municipal archives/library
4. national archives/library
5. city museum of new york
6. brooklyn historical society
7. new york historical society
8. tenement museum
9. arch sites: wykoff farmhouse, lefferts historic house, hamilton harbor defense museum, etc.
10. nyc parks library
11. brooklyn botanical garden
12. mta/transit museum archives
13. interface archives
14. anthology film archive or maysles institute
15. center for urban pedagogy
16. american museum of natural history, planetarium/library/labs

Museums & library archives

- frick collection
- moma
- met
- morgan library
- nypl
- nypl schomburg (harlem)
- cooper hewitt
- various university archives- bard, columbia, cooper union, cuny, nyu, parsons, pratt, teachers, etc.
- jewish museum
- el barrio
- spanish society

Historical Societies & Sites

- brooklyn historical society
- queens historical society
- bronx county historical society
- new york historical society

- staten island museum/institute for art & science
- tenement museum
- arch sites: wykoff farmhouse, lefferts historic house, hamilton harbor defense museum, etc.

Governmental archives & departments (largely local)

- nyc municipal archives/library
- la guardia and wagner archives (cuny)
- national archives (nyc branch)
- fdr presidential library (hyde park)
- landmarks preservation commission (nyc)
- department of buildings (by borough)
- museum of the city of new york
- mta/transit museum archives
- department of sanitation
- department of environmental protection
- state and national information as accessible through web- legal, geological, best practices, gis

Science, environment & ecology research/exhibition

- american museum of natural history, planetarium/library/labs
- usfs urban field station
- gateway/jamaica bay institute (library/research center)
- Cary Institute of Ecosystem Studies (millbrook, mid-hudson)
- various events from am academy of sciences

Specific parks & landscape collaborations

- nyc parks department, library, misc. archive centers
- brooklyn botanical garden
- queens botanical garden
- bronx botanical garden
- park alliances/conservancies- central, prospect, etc.
- prospect park audubon center

Community & activist archives

- interface archives (activist art, gowanus)
- maysles institute (community film, harlem)
- brooklyn arts council- folk arts archive, creative collation partners, etc.
- community justice centers- red hook, crown heights, harlem, etc.
- center for urban pedagogy
- 683/superhero supply
- ...by topic/issue

Arts & Design Outlets

- proteus gowanus (arts misc, brooklyn)
- anthropology film archives (mekus, 60s)
- storefront

- van alen
- the sketchbook project/brooklyn arts library