

ADN592/ARCH590: DIY Cartography**Meeting Times:** F 10:15am - 1:00pm**Location:** Brooks Hall 300**Website:** design.ncsu.edu/co-lab**INSTRUCTORS:****Tania Allen, Assistant Professor of Art + Design**

tania_allen@ncsu.edu

919.515.8359

Office Location: Leazar 404

Office Hours: Tuesdays, 1:30pm - 3pm by appointment

Sara Queen, Associate Professor of Architecture

sara_queen@ncsu.edu

828.400.6178

Office Location: 305 B Brooks Hall

Office Hours: Thursdays, 1:30pm - 3pm by appointment

TEACHING ASSISTANTS:

Aline Nascimento, MLA

ademelo@ncsu.edu

Syllabus

Course Description:

This graduate level seminar uses techniques of mapping—analyzing and making meaning of raw data—as a comparative analytic tool and as a way to uncover hidden meanings between data and reality. Connected to an ongoing project in partnership with the Urban Design Center and the City of Raleigh (COR) Museum, this course will analyze, synthesize and visualize Raleigh's history, engage in field research as comparative analysis, and investigate and reflect on the effect of the mapping process on how data is understood. Through intense observation and interaction with census data, the physical environment and the official and unofficial archival history of Raleigh, students will engage in a rich and triangulated approach to historical and social research. They will use the tools of mapping and synthesis as a way to make meaning of their findings and explain it to the community itself.

Learning Outcomes:

Participants should leave the course with an understanding of current urban research and with a variety of mapping tools to conduct urban and community based research themselves. The course will engage discussions of research and analysis methodologies, i.e., *the how*, but also will attempt to foreground the *why*. How might the mapping process uncover hidden findings or data? What role do these visualization techniques have in coding and decoding urban phenomena? What is the rhetorical value and how might we, as designers, acknowledge the argument that we make through the process of synthesis? How might mapping and the role of the designer affect the research process? What value is added or lost through visualizing complexity?

Pre / Co-requisites:

None.

Restrictions:

This is a graduate level seminar open to all College of Design master degree students as well as fifth-year architecture students. The course is also open to advanced standing undergraduates with instructors' approval who display excellent research skills.

Readings and Resources:

All readings, lectures, and handouts will be available through the course website: <http://design.ncsu.edu/co-lab/> and through e-reserves on the library website.

Core Texts:

Doing Research in Design - Christopher Crouch and Jane Pearce

Design for Information - Isabella Meirelles

Additional Texts

Else/Where: Mapping — New Cartographies of Networks and Territories - Janet Abrams (Editor), Peter Hall (Editor)

The City Reader 5th Edition- Richard T. LeGates

Rethinking the Power of Maps - Denis Wood

The New Nature of Maps - JB Harley

Mappings - Denis Cosgrove

Expenses:

Printing - approximately \$85

Transportation:

Students will be required to provide their own transportation for this class. Non-scheduled class time for field trips or out-of-class activities is NOT required for this class, but may be necessary for research and individual information gathering.

Grade Components:**Attendance_20%**

Students are expected to be on time and present for the entire class. Three unexcused absences will result in failure of the course. Students arriving over 20 minutes late to a class will be counted absent for that class.

Discussion and Class Participation_20%

Students are expected to complete all readings and prepare notes for class discussion for each class meeting. Students are also expected to contribute to class discussion, peer pinups, and blog posts.

Mapping Projects_60%:

Each week students are expected to complete a series of maps which apply the research and mapping methodologies introduced that week to their individual research topic. These research and mapping assignments will be cumulative and synthesized into a final presentation and at the end of the course. Your grade will be based on the following criteria:

Rigor of Research and Analysis:

- Depth and breadth of research and evaluation;
- Ability to make both obvious and hidden connections, illuminate new and undiscovered relationships;
- Movement beyond the surface of the data to question meaning, assumptions and motivations;
- An obvious evolution of the concept through continued, aggregated and evaluated research.

Effectiveness of Communication:

- Effectiveness of the visual and written components of the research and findings;
- A focus on creating both clear and compelling visual iterations that reinforce the findings;
- An exploration of visual language that is varied, relevant and context sensitive;
- Attention to detail and craft which support the research and analysis and show iteration and refinement.

ADN592/ARCH590: DIY Cartography

Meeting Times: F 10:15am - 1:00pm

Location: Brooks Hall 300

Website: design.ncsu.edu/co-lab

INSTRUCTORS:

Tania Allen, Assistant Professor of Art + Design

tania_allen@ncsu.edu

919.515.8359

Office Location: Leazar 404

Office Hours: Tuesdays, 1:30pm - 3pm by appointment

Sara Queen, Associate Professor of Architecture

sara_queen@ncsu.edu

828.400.6178

Office Location: 305 B Brooks Hall

Office Hours: Thursdays, 1:30pm - 3pm by appointment

TEACHING ASSISTANTS:

Aline Nascimento, MLA

ademelo@ncsu.edu

Policies on Incomplete Grades:

If an extended deadline is not authorized by the Graduate School, an unfinished incomplete grade will automatically change to an F after either (a) the end of the next regular semester in which the student is enrolled (not including summer sessions), or (b) by the end of 12 months if the student is not enrolled, whichever is shorter. Incompletes that change to F will count as an attempted course on transcripts. The burden of fulfilling an incomplete grade is the responsibility of the student. The university policy on incomplete grades is located at <http://policies.ncsu.edu/regulation/reg-02-50-3>. Additional information relative to incomplete grades for graduate students can be found in the Graduate Administrative Handbook in Section 3.18.F at http://www.fis.ncsu.edu/grad_publicns/handbook/

Late Assignments:

Assignments will be due on the dates listed in the handouts. Assignments must be posted or turned in according to the stated requirements. Failure to turn in your work on time will result in a grade of zero. This includes printed materials for pinups.

Attendance Policy:

Students are expected to be on time and present for the entire class. Three unexcused absences will result in failure of the course. Students arriving over 20 minutes late to a class will be counted absent for that class. For excused absences see: <http://policies.ncsu.edu/regulation/reg-02-20-03>.

Students are expected to make up any missed course work due to excused absences within a week of their absence. Work missed for unexcused absences is due on the student's first day back in class.

Academic Integrity:

Students are required to comply with the university policy on academic integrity found in the Code of Student Conduct found at <http://policies.ncsu.edu/policy/pol-11-35-01>

Academic Honesty:

See <http://policies.ncsu.edu/policy/pol-11-35-01> for a detailed explanation of academic honesty.

Honor Pledge:

Your signature on any test or assignment indicates "I have neither given nor received unauthorized aid on this test or assignment."

Electronically-Hosted Course Components:

This course may involve electronic sharing or posting of personally identifiable student work or other information with persons not taking or administering the course. Students will be asked to sign a consent allowing disclosure of their personally identifiable work. No student is required to sign the consent as a condition of taking the course. If a student does not want to sign the consent, he or she has the right to ask the instructor for an alternative, private means of completing the coursework.

Accommodations for Disabilities:

Reasonable accommodations will be made for students with verifiable disabilities. In order to take advantage of available accommodations, student must register with the Disability Services Office (<http://www.ncsu.edu/dso>), 919-515-7653. For more information on NC State's policy on working with students with disabilities, please see the Academic Accommodations for Students with Disabilities Regulation at <http://policies.ncsu.edu/regulation/reg-02-20-01>.

Non-Discrimination Policy:

NC State University provides equality of opportunity in education and employment for all students and employees. Accordingly, NC State affirms its commitment to maintain a work environment for all employees and an academic environment for all students that is free from all forms of discrimination. Discrimination based on race, color, religion, creed, sex, national origin, age, disability, veteran status, or sexual orientation is a violation of state and federal law and/or NC State University policy and will not be tolerated. Harassment of any person (either in the form of quid pro quo or creation of a hostile environment) based on race, color, religion, creed, sex, national origin, age, disability, veteran status, or sexual orientation also is a violation of state and federal law and/or NC State University policy and will not be tolerated. Retaliation against any person who complains about discrimination is also prohibited. NC State's policies and regulations covering discrimination, harassment, and retaliation may be accessed at <http://policies.ncsu.edu/policy/pol-04-25-05> or http://www.ncsu.edu/equal_op/. Any person who feels that he or she has been the subject of prohibited discrimination, harassment, or retaliation should contact the Office for Equal Opportunity (OEO) at 919-515-3148.

ADN592/ARCH590: DIY Cartography**Meeting Times:** F 10:15am - 1:00pm**Location:** Brooks Hall 300**Website:** design.ncsu.edu/co-lab**INSTRUCTORS:****Tania Allen, Assistant Professor of Art + Design**

tania_allen@ncsu.edu

919.515.8359

Office Location: Leazar 404

Office Hours: Tuesdays, 1:30pm - 3pm by appointment

Sara Queen, Associate Professor of Architecture

sara_queen@ncsu.edu

828.400.6178

Office Location: 305 B Brooks Hall

Office Hours: Thursdays, 1:30pm - 3pm by appointment

TEACHING ASSISTANTS:

Aline Nascimento, MLA

ademelo@ncsu.edu

Project + Schedule Overview

Map Series 01: Looking at the Nature of Raleigh's History**January 12 - February 16 | 5 weeks****Research Methodology:** Archival Analysis**Mapping Methodology:** Spatio-Temporal Maps

In this first map series, students will work in cross-disciplinary teams to map the development of the city through 5 topical lenses (natural history, socio-cultural history, economic history, political history, and physical development). Through this deep dive into Raleigh's history, you will create a series of maps that look at discrete components of the city at 4 difference scales (Raleigh's original city limits, Raleigh's current boundaries, Wake County and the Triangle) and over the time period of Raleigh's establishment through the present (1792 – 2018). Through these iterations, you will pay special attention to how scale informs and transforms the message of the map through altering the resolution and visible measurements of the systems depicted. This first series of maps and timelines will be used as a common resource to draw upon and build future maps throughout the semester.

Map Series 02: Connecting Visible and Invisible Histories**February 16 - March 23 | 4 weeks****Research Methodology:** Phenomenological**Mapping Methodology:** Network Maps

Case Study research seeks to understand a larger phenomenon by looking specifically at one instance or case as a starting point. Many times, case study research aims to find causal and correlational relationships. This second series of maps will use mapping and case study research to better understand Raleigh's history as a network and system of relationships about what and how we memorialize. Often we think about memorialization through the explicit historical markers, or memorials and monuments that mark our city. In this second map series you will build on the set you created in your first map series, focusing on various levels of memorialization and how that influences our understanding of the people, places, events that have contributed to Raleigh's history and urban development. Moving beyond just the official histories (i.e. markers, memorial and monuments) this map series should also explore the way history is memorialized throughout the urban (physical, political and social) fabric.

Map Series 03: Varied Perceptions of Place**March 23 - April 27 | 4 weeks****Research Methodology:** Observational and Participatory Research**Mapping Methodology:** Narrative Map

In this third series of maps will use mapping along with observational and participatory research methods to capture diverse perspectives and multi-modal perceptions of place. These maps will build on the narratives captured in the first two map series, but also offer a comparative alternative which captures sensed and perceived data in contrast to the more quantitative data used in earlier maps. In this map series, you will create an original data set that you will visualize through geo-spatial, temporal, network or another visual means. We ask that you experiment with a wide range of observational, data collection and recording techniques to construct rich, layered maps which "thicken" our collective definitions of place and history. Building on the term "thick description", borrowed from the social sciences and coined by Gilbert Ryle and Clifford Geertz, these maps aim to not just describe what is at/ on a site today, but explore how maps can uncover and expose a holistic understanding of the dynamic, contextual forces which construct place.

Final Essay

Summary of findings on research topic and reflection on how the mapping process altered, supported and/or contradicted original understandings and assumptions.

ADN592/ARCH590: DIY Cartography**Meeting Times:** F 10:15am - 1:00pm**Location:** Brooks Hall 300**Website:** design.ncsu.edu/co-lab**INSTRUCTORS:****Tania Allen, Assistant Professor of Art + Design**

tania_allen@ncsu.edu

919.515.8359

Office Location: Leazar 404

Office Hours: Tuesdays, 1:30pm - 3pm by appointment

Sara Queen, Associate Professor of Architecture

sara_queen@ncsu.edu

828.400.6178

Office Location: 305 B Brooks Hall

Office Hours: Thursdays, 1:30pm - 3pm by appointment

TEACHING ASSISTANTS:

Aline Nascimento, MLA

ademelo@ncsu.edu

Bibliography

Core Course Texts**We will be reading the following two books regularly:**Crouch, Christopher and Pearce, Jane. *Doing Research in Design*. Bloomsbury Academic, 2012.Meirelles, Isabella. *Design for Information*. Rockport, 2012.**On Maps (Theory):**Corner, J. "The Agency of Mapping" in Cosgrove, D. *Map-pings*. London: Reaktion, 1999. p.213-252.Cosgrove, D. *Mappings*. London: Reaktion Books.Hall, P. and Abrams, J. *Else/Where Mapping*.Harley, JB. *The New Nature of Maps: Essays in the History of Cartography*. Baltimore: Johns Hopkins University Press, 2001.Wood, D. *Rethinking the Power of Maps*. New York: Guildford Press, 2010.Zerubavel, E. *Time Maps*. Chicago : University of Chicago Press, 2003.**On Maps (Application):**Bertin, J. *Semiology of Graphics*. Redlands, CA: ESRI Press.Meirelles, I. *Design for Information: An Introduction to the Histories, Theories, and Best Practices Behind Effective Information Visualizations*.Tufte, E. *The Visual Display of Quantitative Information*. Connecticut: Graphic Press, 2001**On Understanding City:**LeGates, R.T. & F. Stout (Eds.), *The City Reader*. London: Routledge, 1996. p.85-89.Boyer, C. *The City of Collective Memory*. Cambridge: The MIT Press. 1994.**On Design and Community Research:**Crouch, C and Pearce, J. *Doing Research in Design*. New York: Berg, 2012.Denzin, N. and Lincoln, Y.S. *The Sage Handbook of Qualitative Research Methods*. Thousand Oaks: Sage, 2011.Groat and Wang. *Architectural Research Methods*.**Raleigh and Wake County History:**Kulikowski, J.A. and Peters, K.E. *Historic Raleigh*. Charleston: Arcadia Publishing, 2002.Mobley, J. *A Brief History of Raleigh*. Charleston: The History Press. 2009.Murray, E.R. *Wake, Capital County of North Carolina, Volume 1, Prehistory Through Centennial*. Raleigh: Capital County Publishing. 1983.Murray, E.R. *Wake, Capital County of North Carolina, Volume 2, Reconstruction*. Raleigh: Capital County Publishing.Perkins, D. *Raleigh: A Living History of North Carolina's Capital*. Raleigh: The News & Observer. 1994.**Case Studies and Articles of Interest****Image Case-Studies:**Misrach, Richard & Orff, Kate. *Petrochemical America*. Aperture, 2014.Venturi, R. & Scott Brown, D. & Izenour, S. "A Significance for A&P Parking Lots or Learning From Las Vegas" in *Learning from Las Vegas*. MIT, 1972.da Cunha, D and Mathur, A. *Soak : Mumbai in an Estuary*. New Delhi: Rupa & Co., 2009.Wood, D. *Everything Sings*. Los Angeles: Siglio, 2013.Corner, J. *Taking Measure Across the American Landscape*.Gerber, A and Iverson, B. *Where you Are: A Book of Experimental Maps Designed to Get You Lost*. (<http://where-you-are.com/>)Berger, A., *Drosscape: Wasting Land in Urban America*. Princeton Architectural Press, 2007.Columbia's Spatial Information Design Lab, Million Dollar Block: <http://www.spatialinformationdesignlab.org/index.php>Fisk, H. *Alluvial Valley Maps*, USGS 1944: <http://lmvmap-ping.erdc.usace.army.mil/>**Supplemental Reading and Specific Articles of Interest:**Kostelnik C. & Hassett, M. *Shaping Information: The Rhetoric of Visual Conventions*. Carbondale, IL: University of Illinois Press.Lima, M. *Visual Complexity: Mapping Patterns of Information*. New York: Princeton Architectural Press.Lynch, K. "The City Image and its Elements" In R.T. LeGates & F. Stout (Eds.), *The City Reader*. London: Routledge, 1996. p.439-447.Tufte, E. "Images and Quantities." *The Visual Display of Quantitative Information*. Connecticut: Graphic Press, 2001. p.13-26.Tuan, Y. "Spatial Ability, Knowledge and Place." *Space and Place*. Minneapolis: University of Minnesota Press, 1977. p. 67-84.Wirth, L. "Urbanism as a Way of Life." In R.T. LeGates & F. Stout (Eds.), *The City Reader*. London: Routledge, 1996. p.90-97.*This American Life*, Episode 110: Mapping: <http://www.thisamericanlife.org/radio-archives/episode/110/mapping>