Critical Data Studies: A Practicum

Atilio Barreda II | Sample syllabus | 14-week seminar and web studio | Revised November 2026

What the course asks

What has to happen before a record can become a data point? We follow the decisions involved in collecting, classifying, cleaning, displaying, and publishing information. A column name, an omitted value, or the default view of a chart can change the account a dataset gives of the world.

The work moves between close reading and small programs. We read a passage, build something that makes a particular decision visible, and return to the passage with a more precise question. Deconstruction is a practice of following distinctions such as raw/processed or original/copy, including the ways one term depends on what it appears to exclude. A working demonstration gives us evidence to think with; it does not settle the interpretation of a text.

Format and starting point

Each week combines a reading discussion with a studio. No prior critical-theory coursework is assumed. HTML, CSS, SVG, and JavaScript are introduced through short exercises; starter code is available. Projects use small, documented datasets and images students have permission to use.

By the end

- Make a close-reading argument supported by a passage and a specific feature of an interface or dataset.
- Trace a record through transformations and identify what is preserved, altered, or discarded.
- Build a keyboard-usable browser experiment with a legible visual argument and an inspectable data source.
- Compare representations without treating one model as an exhaustive account of the people or objects represented.
- Explain a decision to publish, aggregate, redact, or withhold information, including the limits of that decision.

Assessment

Reading notes and discussion: **20%**. Studio exercises: **25%**. Midterm comparison: **20%**. Final interactive essay: **30%**. Peer critique: **5%**. Reading notes are short: a passage, a claim, and a question for the week's experiment. Evaluation concerns the specificity of the argument, technical care, and revision, not agreement with a prescribed position.

Weeks 1-5 | Records, distinctions, models

1. A record has a point of view

Read: Donna Haraway, "Situated Knowledges," selected passages. Choose a small public collection and inspect who made it, for what purpose, and what it does not document. Build an HTML page that puts a record beside its source and your annotation. **Bring back:** one supported claim and one question the collection cannot answer.

2. A proof and its diagram

Read: Euclid, *Elements*, Book I: definitions, postulates, and Proposition 1. Rebuild the construction in SVG. Label what is given, constructed, and inferred; distinguish a drawing's appearance from the proof it illustrates. **Bring back:** an interactive diagram and a note about an assumption the picture alone cannot justify.

3. What does "raw" leave out?

Read: Derrida, *Of Grammatology*, an excerpt on the supplement. Take a CSV through three small JavaScript functions: parsing, recoding, and aggregation. Keep the input unchanged and display before-and-after records. **Bring back:** a transformation log and a reading of the raw/processed distinction grounded in one actual change.

4. The archive's rules

Read: Derrida, *Archive Fever*, selected passages. Build a searchable collection from a small set of permitted records. Specify the fields, search terms, default order, and entry rules. **Bring back:** two records that trouble your schema and a revision that makes the problem visible rather than silently dropping them.

5. How is similarity made?

Read: Wendy Hui Kyong Chun, *Discriminating Data*, selected passages on correlation and homophily. Use a supplied clustering experiment to compare 2D points with colors sampled from an image. Change features, scaling, and parameters. **Bring back:** two defensible but different partitions, with an account of the choices that produced each. A cluster is not a discovered social identity.

Weeks 6-10 | Material records, images, disclosure

6. What a table cannot carry

Study: one documented khipu in the Khipu Field Guide, alongside its catalog information. Compare a photograph, a cord hierarchy, and a tabular transcription. Make an annotated SVG explaining which material relations each representation can record. **Bring back:** a distinction between observation, catalog convention, and interpretation. The exercise studies a documented object; it does not claim to reconstruct a complete Andean knowledge system.

7. Midterm: one collection, two interfaces

Build two views of the same collection that make different relationships easy to see. Present a five-minute comparison and an 800-word argument using one assigned text. A peer should be able to follow a record from the source to both views. Revise one design decision after critique and document why it changed.

8. Copies, compression, circulation

Read: Hito Steyerl, "In Defense of the Poor Image." Resize and compress an image you made or have permission to reuse. Record file size, visible changes, and what happens to accompanying metadata. **Bring back:** a browser-based visual essay about the conditions under which an image circulates. Include captions and a text account of the comparison.

9. Classification has consequences

Read: Ruha Benjamin, *Race After Technology*, a selected case study. Examine a documented classification rule, then model its operation with synthetic records. Show who is included, excluded, or left unresolved when the rule changes. **Bring back:** a test case the first implementation gets wrong and a discussion of what a technical correction can and cannot address.

10. Opacity and the decision not to publish

Read: Edouard Glissant, "For Opacity," and GIDA's CARE Principles. Draft a publication plan for your project: what is necessary to show, who has authority to decide, and what must stay out. **Bring back:** a public-facing version using synthetic or appropriately aggregated data. Removing names is not, by itself, a guarantee against identification.

Weeks 11-14 | An argument someone can examine

11. Defaults are part of the argument

Review the opening view, sort order, color scale, and available filters in your project. Ask a peer to describe what it seems to claim before using any controls. Add keyboard navigation, visible focus, meaningful labels, and a table or textual alternative. **Bring back:** a short account of how interpretation changed during testing.

12. Follow a relationship through the system

Draw the route from source record to transformed data to visual mark. Compare two orders of operations, such as filtering before aggregation and filtering an aggregated result. Write a small test for a relationship you expect to preserve. This is an entry point to thinking about composition and invariants, not a requirement to know category theory. **Bring back:** a diagram, a test, and an explanation of a mismatch.

13. Revision and publication review

A peer runs your project from its instructions and checks a claim against the source. Review licenses, data permissions, small-screen layout, and missing-data behavior. Fix the most consequential problem first. **Bring back:** a revision note and a decision about whether the project belongs on the public web, in a limited-access setting, or only in the classroom.

14. Final critique

Present the interactive essay and a 1,200-1,500-word commentary. Explain one passage that changed your design, one thing your representation cannot carry, and one choice you revised after testing. A documented local demonstration is acceptable when public release would expose people or materials without permission.

The final submission

Submit the running project, a source repository or local archive, a data/provenance note, and instructions that another student can follow. The commentary must connect its interpretation to identifiable features of the work. Include both a successful example and a case that resists your account. Complexity, animation, or the number of theorists cited does not substitute for a well-supported argument.

Possible forms include an annotated image archive, a comparison of classification schemes, or an interactive essay about what aggregation conceals. The form should follow the question. A quiet table may do more useful work than an elaborate network diagram.

Reading and working references

The syllabus uses excerpts, not every book in full. Editions and passages would be specified for an actual offering, with library or openly available access arranged. The linked pages identify the works; not all books are open access.

- **Donna Haraway.** "Situated Knowledges: The Science Question in Feminism and the Privilege of Partial Perspective". *Feminist Studies* 14, no. 3 (1988).
- **Euclid.** *Elements*, Book I. David E. Joyce's online edition; definitions, postulates, and Proposition 1.
- **Jacques Derrida.** *Of Grammatology*, translated by Gayatri Chakravorty Spivak. Selected passages on the supplement.
- **Jacques Derrida.** *Archive Fever: A Freudian Impression*, translated by Eric Prenowitz. Selected passages on archives and authority.
- **Wendy Hui Kyong Chun.** *Discriminating Data: Correlation, Neighborhoods, and the New Politics of Recognition*. Selected passages on similarity and grouping.
- **Khipu Field Guide.** Catalog, drawings, and database documentation. Use a named record and cite its documentation; note the limits of its interpretation.
- **Hito Steyerl.** "In Defense of the Poor Image". *e-flux journal* 10 (2009).
- **Ruha Benjamin.** *Race After Technology: Abolitionist Tools for the New Jim Code*. Polity, 2019. One case study for close discussion.
- **Edouard Glissant.** *Poetics of Relation*, translated by Betsy Wing. "For Opacity."
- **Global Indigenous Data Alliance.** CARE Principles for Indigenous Data Governance. Read as a governance framework with specific authorities and obligations, not a generic checklist for any dataset.

Studio references

MDN Web Docs supports the HTML, CSS, JavaScript, and SVG exercises. The W3C accessibility tutorials support testing of images, tables, labels, and keyboard interaction. Keep a short README and a record of changes from the first exercise onward.