

**The Digital Historian's Toolkit:  
Studying the West in an Age of Big Data**

Autumn 2012 – History 59S

M/W 4:15PM - 5:45PM

Building 160, Room 120

Cameron Blevins

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Building 200 (History Corner), Room 204

Office Hours: Tue 9:00-11:00AM (and by appointment)

Course Website: <http://cameronblevins.org/teaching/dhtk2012/>

**COURSE DESCRIPTION**

How did nineteenth-century Americans imagine the space of the American West between the discovery of California goldfields in 1848 and the purported "closing" of the frontier in 1893? The course answers this question through an introduction to the practice of digital history in an age of "big data." By pairing traditional forms of historical analysis with cutting-edge technological tools, the class will explore how competing visions of the West played out in the mental maps of nineteenth-century Westerners and non-Westerners. Which regions and places were over- and under-represented in these imagined landscapes? What physical changes in space (railroads, overland migration, communications networks) underlay perceptions of space?

The course is divided into two parallel tracks. On each week's first meeting, students will critically analyze individual primary sources (maps, letters, novels, travel guides, etc.) related to a single theme, such as mining booms, settler-Indian relations, or travel and tourism. In the second meeting of the week, students will operate in a "lab" setting to analyze a similar source digitally. This will provide students with an introduction to the technical skills and issues surrounding archival digitization, Geographic Information Systems (GIS), text and data mining, and information visualization. A collaborative final project will employ these tools to analyze how a specific place, locale, or sub-region manifested itself in nineteenth-century spatial imaginations and present this analysis through an electronic medium.

**COURSE OBJECTIVES**

The course merges traditional humanistic inquiry with digital tools in order to prepare students to tackle the challenges and opportunities of not just the historical archive, but today's broader data deluge. This toolkit fosters three major sets of skills: historical, technical, and collaborative.

1. *Historical*: Locate and critically analyze primary documents related to the imaginative geography of the American West, taking into account factors such as authorship, intent, and historical context.
2. *Technical*: Gain basic competency in: digitization, Geographic Information System (GIS), introductory text mining, database creation, and information visualization.
3. *Collaborative*: Work in small groups to complete lab assignments and a final project.

## EVALUATION

**20% Participation** – Active in-class and in-lab participation is crucial for passing the course and a skill just like reading or writing – one that you can improve on with practice. Participation starts with preparation: it is impossible to effectively participate if you haven't done the week's reading or completed a lab tutorial before the beginning of class. It continues with engagement with the week's topic, readings, and your classmates. And it finishes with respect towards your peers. You will be talking, debating, and disagreeing with one another during discussion classes, labs, presentations, and projects. I will be evaluating you based not just on what you say or how often you talk, but on how effectively and respectfully you interact with your classmates.

**20% Labs** – There will be five labs during the quarter, each worth 4% of the overall grade. You will follow the lab assignment and then turn in a report answering questions related to the lab. The written responses are due electronically via email within **48 hours** of the lab, unless otherwise noted.

Lab #1 due: **10/5/12**

Lab #2 due: **10/12/12**

Lab #3 due: **10/19/12**

Lab #4 due: **10/26/12**

Lab #5 due: **11/2/12**

**25% Short Paper (15% Paper, 10% Revision)** – You will write one short, five-page paper analyzing how a particular place in the American West was seen by nineteenth-century Americans. You will do so using two primary sources (one visual, one written). “Place” can be broadly defined - a sub-region, state, area, city, town, building etc. You are expected to provide brief context for the place in question and then apply close reading to the two sources selected. A guide to finding primary sources along with a preliminary list of possible example sources will be provided prior to the assignment. After submitting the paper and receiving feedback, you will revise the paper and re-submit it. I will then re-grade the revised paper using the same criteria as the original paper.

Paper Due: **10/22/12** (Monday) by 4:15PM

Revision Due: **10/31/12** (Wednesday) by 4:15PM

**5% Class Presentation** – Verbal skills are often just as important as written ones. After submitting the revised version of their first paper you will give a five-minute presentation on the place you wrote about and the two sources you used. Time limits will be strictly enforced – identify what the most important point of your paper was and focus on that.

In-Class Presentation Due: **11/5/12** (Monday)

**30% Final Project (10% Draft, 20% Final)** – Students will complete a collaborative project expanding on the theme of their first paper. As a group, you will select a place and make an argument about how it was “mentally mapped” in the nineteenth century using digital methods. The project will include both written and visual arguments and be presented in the form of an

online site. It will be evaluated based on the clarity and force of arguments, use of different kinds of source material (both primary and secondary), and the depth of support and analysis. The group will present a draft of their project and receive feedback during the second-to-last week of the quarter. They will then revise their project and formally present it in an open public forum on the last day of the quarter.

Draft and presentation due: **11/30/12** (Friday) by 4:15PM

Final project and presentation due: **12/5/12** (Wednesday) in class

Individual reports of each member's contributions due: **12/7/12** (Friday) by 4:15PM

## POLICIES AND PROCEDURES

### Attendance:

Attendance at each class and lab is mandatory. Two unexcused absences are allowed per student for the quarter, but each additional unexcused absence will impact your participation grade. All absences (excused and unexcused) must be made-up with a 300-400 word response to the day's readings that selects two of the major themes to analyze/critique/elaborate on, due within one week of the absence. Being on time is part of attendance – every two unexcused late arrivals will count as an absence. Please see me with any questions about this policy.

### Assignments:

Papers and labs are due to me electronically via email (cblevins@stanford.edu) **by 4:15PM on the due date**. When grading papers I will use the attached rubric. My feedback will consist of broad comments, some minimal notes in the margins, and a rubric-based breakdown of scores for each category of evaluation totaling a possible 50 points. Papers will be penalized by **one half letter grade for each day they are late** (an A paper becomes an A-, an A- to B+, etc.). Please let me know if you have any questions.

### Technology:

Although bringing a laptop or tablet device to class is not required, it is highly recommended given the digital emphasis of the curriculum. Much of our discussions will involve websites, images, maps, and sources that are best viewed on a screen. However, resist the urge to use your laptop for non-course related purposes. I will be keeping track of how actively you engage with and listen to your peers – if you make more eye contact with your laptop screen than your classmates, your participation grade will suffer immediately and dramatically.

### Office Hours:

Take advantage of office hours as an opportunity to talk about any aspect of the class: the week's reading, ideas and strategies your paper or project, feedback on your writing, or difficult themes and concepts. Please meet with me during office hours **at least once** during the first three weeks of the quarter, by **Friday, October 12<sup>th</sup>**. An online sign-up sheet will be sent via email for you to reserve a timeslot for your mandatory meeting. During the remainder of the quarter you are always welcome to come by without setting up a time in advance, but I recommend using this sheet to reserve a spot and avoid waiting for me to finish talking with another student. I look forward to getting to know each of you!

### Students with Disabilities:

Students who may need an academic accommodation based on the impact of a disability must initiate the request with the Office of Accessible Education (OAE). Students should contact the OAE as soon as possible since timely notice is needed to coordinate accommodations. Please note that full confidentiality will be respected.

Office of Accessible Education  
563 Salvatierra Walk  
Phone: 723-1066  
Website: <http://studentaffairs.stanford.edu/oae>

### **Honor Code:**

All students are responsible for understanding and complying with the Stanford Honor Code. This applies to not only individual work but also conducting and submitting work within a collaborative framework. Each member of a group project is expected and required to complete their fair share of the work. For details, see <http://judicialaffairs.stanford.edu>

## **SCHEDULE**

\* = readings available on password-protected shared folder

### **Week 1: What is Digital History?**

#### **1.1: Introduction (9/24)**

- Introductions and Icebreakers
- Syllabus
- Final Project
- Spatial imagination:

#### **1.2: What is Digital History and Why Does it Matter? (9/26)**

Reading Assignments (Secondary):

- [Economist video graphic](#) on "Big Data" November 18th, 2011
- [Economist article](#) on "Big Data" November 17, 2011
- Yuki Noguchi, ["The Search for Analysts to Make Sense of "Big Data."](#) *NPR*, November 30, 2011
- Patricia Cohen, ["Analyzing Literature by Words and Numbers."](#) *NYTimes* December 3, 2010
- Patricia Cohen, ["Digital Keys for Unlocking the Humanities' Riches."](#) *NYTimes* November 17, 2010

\*\*\* Note: preparation for the first lab next week (10/3) requires completion of two ArcGIS tutorials, each of which take approximately one hour to complete. Please plan ahead.\*\*\*

### **Week 2: Maps and Mining**

#### **2.1: How to Read a Map – Mining and the West (10/1)**

Reading (Secondary):

- \*J.B. Harley, "Text and Contexts in the Interpretation of Early Maps" – Chapter 1 of *The New Nature of Maps* (2001), 33-49.

- \*Warren Beck and Ynez Haase, *Historical Atlas of the American West - Territorial Expansion, European Settlement* (41-43)
- \*Mark Carnes, *Historical Atlas of the United States*, "The Gold Rush" (145), "The Frontier in 1890" (174-175)

Reading (Primary):

- [Ensigns and Thayer, "Map of the Gold Regions of California, Showing the Routes via Chagres and Panama, Cape Horn, &c, 1849](#)
- [US General Land Office, "Map of the State of Nevada," 1866](#)
- [Gunn and Mitchell, "Kansas and the Gold Mines," 1862](#)

**2.2: Lab - Working With Maps (10/3)**

Assignment:

- Complete tutorials at Spatial History Lab or Branner Library (approximately 1 hour each)
  1. "Intro to ArcCatalog: Acquiring and Managing Data"
  2. "Intro to ArcMap: Exploring and Visualizing Spatial Data"

Reading (Secondary):

- \*Richard Talbert and Tom Elliott, "New Windows on the Peutinger Map of the Roman World," in *Placing History: How Maps, Spatial Data, and GIS are Changing Historical Scholarship* (2008), 199-218.

**Week 3: Text and Trails**

**3.1: How to Read Text – The Overland Trail (10/8)**

Reading (Secondary):

- \*Two tables of overland emigrant statistics, from John Unruh, *The Plains Across* (1979):
  - Table 1: Overland Emigrants to Oregon, California, and Utah, 1840-1848 (p. 119)
  - Table 2: Overland Emigrants to Oregon, California, and Utah, 1849-1860 (p. 120)

Reading (Primary):

- [Lansford Hastings, The Emigrant's Guide to Oregon and California \(1845\)](#)
  - Chapter XIV: A Description of Different Routes (p. 134-142)
- \*Rebecca Ketcham, "From Ithaca to Clatsop Plains: Miss Ketcham's Journal of Travel" (1853)
  - [Selections: p. 247-251, 348-350, 378-380](#) [PDF] - Full text available on JSTOR: [Part I](#), [Part II](#)
- \*Franklin Langworthy, "Scenery of the Plains, Mountains, and Mines" (1855)
  - [Selections: Preface, p. 7-9, 70-73, 91-96, 136-141, 178-179](#) [PDF]- [Full text](#) available on Google Books

**3.2: Lab - Working with Text (10/10)**

Reading (Secondary):

- Stanford's *Tooling Up for Digital Humanities* series on ["Digitization"](#)
- Dan Cohen, ["Is Google Good for History?"](#) [dancohen.org](#) (7 Jan 2010)
- Benjamin Schmidt, ["Digital History and the Copyright Black Hole,"](#) *Sapping Attention* (21 Jan. 2011)
- ["HathiTrust Statement on Author's Guild, Inc. et. al. v. HathiTrust et al."](#)

## **Week 4: Building a Network: The U.S. Government Moves West**

### **4.1: The Pony Express and Imaginative Geography (10/15)**

Reading (secondary):

- [Background on Pony Express](#) from the Pony Express Museum
- [Video clip on Pony Express \(Wells Fargo\)](#)

Reading (primary):

- [Newspaper account of Pony Express opening](#) – Glasgow, Missouri (April 12, 1860)
- [Resolution submitted to US Senate](#) by California Legislature (signed by Governor Leland Stanford) calling for re-instituting the Pony Express (1862)
- [Map of Pony Express, with illustrations](#)

### **4.2: Lab - Building a Database – The Postal System (10/17)**

Assignment:

- Complete tutorial, "Mapping Locations and Using ArcToolbox"

Reading (secondary):

- Cameron Ormsby, "[Speculative Spaces: Land Speculation and Social Formation in Two California Counties.](#)" Stanford Spatial History Project (1 September 2011).

## **Week 5: Literature and Distant Reading**

### **5.1: The Literary Spatial Imagination (10/22)**

Reading (primary):

- \*Mark Twain, *Roughing It* (1872) (selections)
  - [Volume I](#): 1-4, 28-30, 52-54, 63-87, 131-135, 194-200, 207-209
  - [Volume II](#) - 155-160

**\*\*\* Note: Paper One Due Monday, 10/22 by 4:15PM \*\*\***

### **5.2: Lab - Distant Reading (10/24)**

Reading (secondary):

- Robert Nelson, "[Mining the Dispatch](#)" (Introduction) and explore the [website](#).

## **Week 6: Power, Race, and Space in the West**

### **6.1: Space and Native Peoples (10/29)**

Reading (secondary):

- JB Harley, "[Maps, Knowledge, and Power](#)" (1988) from *The Iconography of Landscape*.

Reading (primary):

- "[Map of a Reconnaissance between Fort Leavenworth on the Missouri River, and the Great Salt Lake](#)" (1852)
- Map of "[Indian Territory, New Mexico, South Dakota, Texas](#)" (1889)

- [Pamphlet from Buffalo Bill's Wild West Show](#)

## **6.2: Lab - Visualizing Race in the Urban West (10/31)**

Reading (secondary):

- \*Edward Tufte, *The Visual Display of Quantitative Information* (2001)

[Chapter 1: Graphical Excellence \(p. 13-27\)](#)

[Chapter 4: Data-Ink and Graphical Redesign](#)

[Chapter 5: Chartjunk: Vibrations, Grids, and Ducks](#)

**\*\*\* Revision of Paper One due 10/31/12 by 4:15PM\*\*\***

## **Week 7: Place-Making in the West**

### **7.1: Individual Student Presentations (11/5)**

Assignments:

Prepare a five-minute presentation on your first paper for the class. The presentation will provide a brief introduction to the place you analyzed, the sources you used, and the conclusions you drew about that place. **The five minute time-limit will be strictly enforced** – practice your presentation at least once to make sure you fall within five minutes. Do NOT try and include everything from your paper. I will be preparing a Prezi slideshow with one slide per student that includes your name, the title of the paper, and a single image (optional) you would like to accompany your presentation. **Email me the image at least two hours before class period (2:15PM).**

### **7.2: Final Projects – First Steps (11/7)**

Assignments:

- Complete Final Project Assignment #1: Initial Project Proposal and submit via email one hour before the start of class (3:15PM on Wednesday, November 7<sup>th</sup>)

\*\*\*Note: You will be meeting as a group during lab and answering a series of questions about your topic for your lab assignment (attendance is mandatory).\*\*\*

## **Week 8: Travel and Tourism // Final Projects**

### **8.1: Travel and Tourism (11/12)**

Reading (secondary):

- \*Patricia Limerick, “Seeing and Being Seen: Tourism in the American West” in David Wrobel and Patrick Long, eds., *Seeing and Being Seen: Tourism in the American West* (University of Kansas Press, 2001), 39-58.

Reading (primary):

- \*Introduction (p. 9-12) from Benjamin Truman, [Homes and Happiness in the Golden State of California](#) (1885)

- \*Selected Advertisements from Benjamin Truman, [Tourists' Guide to the Celebrated Summer and Winter Resorts of California](#) (1883)

Assignments:

- Each *member* of the group will bring **one primary source** to class related to your group's final project.

## 8.2: Final Project – Lab Time (11/14)

Note: Today will be an “open” lab period to work on your final projects (attendance is mandatory). I will be available for ad-hoc consultation. Use the time to continue gathering sources and information, laying out your format, and outline the written elements of the final project.

\*\*\*Final Project Assignment #2: Outline, Due on Friday, 11/16 by 4:15PM\*\*\*

--Thanksgiving Recess: No class 11/19 and 11/21--

### Week 9: Revisions

#### 9.1: New Western History (11/26)

Reading (primary):

- Frederick Jackson Turner, [“The Significance of the Frontier in Western History”](#) (1893)

Reading (secondary):

- Alan Brinkley, [“The New Western Historians: Don't Fence Them In.”](#) *New York Times* (20 September 1992)

#### 9.2: Final Project – Lab Time (11/28)

Assignments:

- Complete Final Project Assignment #3: Revised Group Roles, and submit via email one hour before the start of lab, on **Wednesday, 11/28 by 3:15PM.**

- Explore the following historical visualizations from the Spatial History Project and come to class prepared with at least one compliment and one criticism for each:

- [“CB&O Blacklist, 1877-1888”](#) from Eli Katz and Danny Towns, “Conflict on the Q!: Dismissals of Burlington Railroad Workers, 1877-1888”

- [“Chinese Canadian Immigrant Pipeline”](#)

- Three visualizations from Andrew Robichaud, [“Trail of Blood”](#)

Note: Today will be another “open” lab period to work on your final projects (attendance is mandatory). I will be available for ad-hoc consultation.

\*\*\* Rough Draft of Final Project due Friday, 11/30/12 by 12:00PM\*\*\*

### Week 10: Wrapping It Up

#### 10.1: The Big Picture (12/3)



Reading (secondary):

- Miriam Posner, "[Think Talk Make Do: Power and the Digital Humanities](#)" *Journal of Digital Humanities* (June 2012)
- Jeffrey R. Young, "[Inside the Coursera Contract: How an Upstart Company Might Profit From Free Courses](#)" *The Chronicle of Higher Education* (19 July 2012)
- Trevor Owens, "[Discovery and Justification are Different: Notes on Science-ing the Humanities](#)" *trevorowens.org* (19 November 2012)

## **10.2: Final Project Presentations (12/5)**

Assignments:

- The group will conduct a 15-20 minute presentation of their project, after which they will field questions from the audience. Possible topics to cover:
  - What was your topic and what were your conclusions?
  - What were the challenges involved with the project?
  - Which group members contributed to which aspects of the project?
  - If you had three more weeks to work on the project, what would you have liked to accomplish?

**\*\*\*Final Project due by the beginning of class, 4:15PM\*\*\***

**\*\*\*Individual reports on each member's contributions due Friday, 12/7 at 4:15PM\*\*\***