



# HIST 615 (2015) History & Cartography

History 688-001  
Fall 2015  
Robinson A 352  
T 7:20-10:00  
Prof. Paula Petrik  
<http://www.archiva.net>

Office: 335 Robinson B  
Office Telephone: 3-1250  
Office Hours: M 12:15-1:15,  
T 3:00-5:00, and by appt  
[ppetrik@gmu.edu](mailto:ppetrik@gmu.edu)

## SCHEDULE

Tuesday,  
September 1

—

Housekeeping & Introductions  
Discussion:  
Maps & Historians  
Map: "A Table Setting," 1922 (handout)  
Practicum: Illustrator & Cartography  
Pen Tool

Monday,  
September 7

—

**NO CLASS (Labor Day)**  
**BLOG URL DUE**

Tuesday,  
September 8

—

### LAST DAY TO ADD CLASSES

Reading: Keeping a Historian's Perspective

1. Henri Lefebvre, *The Production of Space*
2. Denis Wood, *Rethinking the Power of Maps*, Chaps. 1-3 (download)
3. J. B. Harley, *The New Nature of Maps*, Chaps. 1, 4-5 (download)
4. David Woodward, "Introduction" in David Woodward, ed., *Art and Cartography* (download)
5. Bodenhammer et al., *The Spatial Humanities*, Chaps. 1-2, 4

Websites: Collections

1. [Perry-Castañeda Library Map Collection](#)
2. [USGS Historical Topographic Map Explorer](#)
3. [David Rumsey Collections](#)
4. [Map History](#)
5. [American Memory: Maps](#)

Practicum: Illustrator & Cartography  
Live Trace & More Pen Tool

**BLOG POST #1 DUE**

Tuesday,  
September 15

—

Reading: Natives & Newcomers

1. J. B. Harley, *The New Nature of Maps*, Chap. 6 (download)
2. Woodward et al., *History of Cartography*, Vol., 2, Book 4 (download)
3. Barbara E. Mundy, "Mapping the Aztec Capital: The 1524 Nuremberg Map of Tenochtitlan, Its Sources and Meanings," *Imago Mundi*, Vol. 50 (1998): 11-33 (online)

Maps: A Colonial Hybrid

1. "Tenochtitlan, 1524" (download)

		Websites: An Indigenous Map 1. <a href="#">1837 loway Map</a> Discussion: Kinds of Maps Practicum: Illustrator & Cartography Inner Glow Etc <b>BLOG POST #2 DUE</b>
Tuesday, September 22	—	Reading: 1. Jeremy Black, <i>Maps and History</i> 2. Derek Hayes, <i>Historical Atlas of the United States</i> Discussion: Historical Atlases & Final Projects Websites: 1. Edward Quin, <a href="#">Historical Atlas</a> , 1830 2. Fletcher Hewes, <a href="#">Statistical Atlas, United States</a> , 1880 3. Cole Harris, ed., <a href="#">Historical Atlas of Canada</a> , 1993 4. Stephen Hornsby, ed, <a href="#">Historical Atlas of Maine</a> , 2010 Discussion: Historical Atlases & Final Projects Practicum: Mapping Software Ortelius Demo & Natural Scene Designer <b>BLOG POST #3 DUE</b> <b>HISTORICAL ATLAS EVALUATION DUE</b>
Tuesday, September 29	—	Reading: Cartographic Tools & Resources for Historians 1. Anne Kelly Knowles & Amy Hillyer, <i>Placing History</i> 2. John Krygier, <i>Making Maps</i> (recommended) Websites: Map Sources & Tools 1. <a href="#">Shaded Relief: Guide to Making Bird’s-eye Views</a> 2. <a href="#">Relief Shading: Try It</a> 3. <a href="#">GIS Community (\$)</a> 4. <a href="#">TypeBrewer</a> 5. <a href="#">ColorBrewer</a> Practicum: Mapping Software Natural Scene Designer <b>BLOG POST #4 DUE</b>
Friday, October 2	—	<b>LAST DAY TO DROP CLASSES</b>
Tuesday, October 6	—	Reading: Maps & US History–Overview 1. Susan Schulten, <i>Mapping the Nation</i> Websites: 2. <a href="#">Mapping the Nation</a> 3. <a href="#">Strange Maps</a> 4. <a href="#">Places That Don’t Actually Exist</a> 5. <a href="#">Maps That Will Help You Make Sense of the Word or Not</a> Practicum: DEMs & “Rubber Sheeting” Natural Scene Designer <b>BLOG POST #5 DUE</b> <b>FREEHAND &amp; DIGITAL MAPS DUE</b>
Tuesday, October 13	—	<b>NO CLASS (Columbus Day)</b> <b>BLOG POST #6 DUE</b>

- Tuesday,  
October 20 —
- Reading: Maps & US History–The 18th Century
1. Martin Brückner, *The Geographic Revolution in Early America*
  2. Martin Brückner, “The Material Map: Lewis Evans and Cartographic Consumer Culture, 1750-1775,” *Common-Place*, Vol. 8, No. 3 (2008): 1–10 (online)
- Websites: Sanborn Maps
1. [Sanborn Maps: LOC](#)
  2. [Sanborn Maps: Utah](#)
  3. [Sanborn Maps: Florida](#)
  4. [SketchUp Video Tutorials](#)
- Practicum: Landscapes  
Vue d’Esprit Demo  
**BLOG POST #7 DUE**
- Tuesday,  
October 27 —
- Reading: Maps & US History–The 19th Century
1. Anthony Grafton et al., *Cartographies of Time*
  2. Penny L. Richards, “Could I but Mark Out My Own Map of Life”: Educated Women Embracing Cartography in the Nineteenth-Century American South,” *Cartographica*, Vol. 39, No. 3 (2004) 1–17 (online)
  3. Diane Dillon, “Mapping Enterprise: Cartography and Commodification at the 1893 World’s Columbian Exposition” in Helena Michie, ed., *Nineteenth-Century Geographies: The Transformation of Space* (download)
- Website: Experiment
1. [Explorations in Time & Space](#)
- Practicum: Architecture, Terrain & Landscape  
Vue d’Esprit Demo & SketchUp  
**“RUBBER SHEETING” PROJECT DUE**  
**BLOG POST #8 DUE**
- Tuesday,  
November 3 —
- Reading: Maps & History–The 20th Century
1. Diane Dillon, “Consuming Maps,” Chap 7 in James R. Akerman et al, *Maps: Finding Our Place*
  2. Susan Schulten, “Richard Edes Harrison and the Challenge to American Cartography,” *Imago Mundi*, Vol. 50, (1998): 174–188 (online)
  3. James R. Akerman, “Twentieth-Century American Road Maps and the Making of a National Motorized Space,” Chap. 5 in James R. Akerman, ed., *Cartographies of Travel and Navigation*
  4. John Cloud, “American Cartographic Transformations during the Cold War,” *Cartography and Geographic Information Science*, Vol. 29, No. 3 (2002): 261–282 (online)
- Practicum:  
SketchUp  
**BLOG POST #9 DUE**
- Tuesday,  
November 10 —
- Reading: Maps of Imagination
1. Katherine Harmon, ed., *You Are Here*
  2. Richardo Padron, “Mapping Imaginary Worlds,” Chap 6 in James R. Akerman et al, *Maps: Finding Our Place in the World*
- Websites: Imaginary Worlds
1. [Fantasy Cartography: Parts 1–8 \(also iTunes\)](#)
  2. [Dell Map Back Mysteries](#)
- Practicum:  
SketchUp  
**BLOG POST #10 DUE**

Tuesday, November 17	—	<p>Reading: Maps &amp; History–The 21st Century  1. David Bodenhammer et al., The Spatial Humanities, Chaps. 8, 10</p> <p>Discussion: Final Projects  Problems &amp; Resources</p> <p>Website: Online Mapping  <a href="#">Mapbox</a> (download application &amp; play a little)</p> <p><b>ARCHITECTURAL RECONSTRUCTION PROJECT DUE</b>  <b>BLOG POST #11 DUE</b></p>
Tuesday, November 24	—	<p>Practicum:  Mapbox Studio</p> <p><b>BLOG POST #12 DUE</b></p>
Tuesday, December 1	—	<p>Practicum:  Mapbox Studio</p> <p><b>BLOG POST #13 DUE</b></p>
Tuesday, December 8	—	<p>Practicum:  Mapbox Studio</p> <p><b>BLOG POST #14 DUE</b></p>
Tuesday, December 15	—	<p><b>FINAL PROJECT DUE</b>  <b>SELF-EVALUATION DUE</b></p>

## COURSE & LEARNING OBJECTIVES

Historians are most accustomed to dealing with maps as basic topographical or political descriptions, but maps can be read as evidence in their own right. This course sets out to accomplish three goals: to introduce students to the idea of spatial relationships as historical evidence, to impart the skills to make a reasonably sophisticated map, and to experiment with the application of 3-D to historical visualization and reconstruction. The course, therefore, is both a traditional history and applied digital history course. While ArcView is the standard GIS software application and very useful to historians, those interested in learning ArcView are encouraged to consult the Geography Department's offerings.

The course will begin by rethinking maps (loosely defined as any spatial arrangement), proceed to examining maps as evidence, and extend its inquiry to analyzing how maps can be used by historians. It will carry on by ferreting out maps suitable for digital adaptation and, thence, to creating a well-designed map in a vector-based application (Illustrator). The course will then turn to a terrain generator (Natural Scenery Designer) and work on a "rubber-sheeting" project. Finally, participants will engage in a historical reconstruction using a combination of one or more of the following: an architectural program (SketchUp), Sanborn Insurance maps, Google Earth, or bird's-eye view maps, among others.

This course is designed for students in either traditional or applied tracks (New Media) in the history graduate program, graduate students in allied disciplines, or advanced undergraduates. Graduate students, for example, who contemplate using maps in their dissertation work, will find the course extremely helpful. Although the course has a heavy computer component, it is intended for those with intermediate computer skills and assumes no prior knowledge of any of the software applications required for the course. Students who have completed Clio 2 (HIST 697- History & New Media), a graduate GIS or cartography course, or who possess a solid computer background will find their skills equal to the demands of the course.

At the conclusion of the course students will be able to: 1) describe the current debates in cartography and cartographic history; 2) analyze the various kinds of maps as to their purpose and construction; 3) use the basic component of maps construction and design; 4) understand the uses of spatial analysis in historical research; 4) draw both a freehand and electronic map; 5) analyze and reconstruct both a historical three-dimensional landscape and architectural subject; 6) synthesize the cartographic materials into a final project that uses space as a category of historical analysis.

## BOOKS

The following books are required for the course. They are available in the Campus Bookstore or from other vendors far and wide. These texts, essentially, demonstrate the use of the various documents that we will be looking at in class. Read them quickly as examples of how scholars have thought about maps and what can be done with maps.

Henri Lefebvre, *The Production of Space*  
Derek Hayes, *Historical Atlas of the United States*  
Jeremy Black, *Maps and History: Constructing Images of the Past*  
Martin Brückner, *The Geographic Revolution in Early America: Maps...and National Identity*  
James R. Akerman & Robert W. Karrow, Jr., *Maps: Finding Our Place in the World*  
Anne Kelly Knowles & Amy Hillyer, *Placing History*  
Katherine Harmon, ed., *You Are Here*  
Susan Schulten, *Mapping the Nation*  
Anthony Grafton et al., *Cartographies of Time*  
David J. Bodenhamer, John Corrigan, Trevor M. Harris, eds., *The Spatial Humanities*

## BLOG

You are required to maintain a blog. The easiest and least stressful is obtaining a Wordpress blog <<http://en.wordpress.com/signup/>>. (If you don't have a domain name at this point, it's a good idea to get one when you get your Wordpress blog.) All of your writing assignments will be posted to your blog. You may discover that you like blogging so much that you use your blog for other classes or for different purposes. We will not use Blogger (or any other free service that depends on advertising, for that matter) because of the intrusive ads, server unreliability, and spam problems.

A word about design. Good design helps your blog visitors find what they are looking for and read it once found. Certain design elements contribute to readability and legibility. For your blog, you can choose any design that both uses dark text on a light background and that is suitable for history. Many of the mixed media, specialty designs, or hobby themes are not appropriate for history blogging. Please do not use

white text on a black background, a technique designers call “reversing out.” It is very difficult to read and poses problems for both legibility and readability.

## SOFTWARE

History & Cartography has some special software requirements. Some of you are able to get your employer to buy the software, given enough time; some of you are on your own hook. Yes, I know more dollars, but no one ever said that digital history was cheap. I’ve tried to make the course as inexpensive as possible. Here is what you will need for software): Adobe Illustrator CC2015; Adobe Photoshop CC2015 OR Adobe Photoshop Elements 12.0; Natural Scene Designer 6.0; and SketchUP Pro. Several websites discuss free tools that perform the same functions as Natural Scene Designer, (but you can also pull out your hair in tufts.) You can acquire Illustrator and Photoshop at educational prices at Patriot Computers or you can sign up for a monthly program at Adobe. As for Natural Scenery Designer, I will be asking the developer for special pricing. SketchUp is available for students through an educational reseller. You will need to follow the directions on SketchUp’s website to get yourself outfitted.

A colored Pencil Set is also required. A small set on the order of Koh-I-Noor Polychrom Dry Color Drawing Pencils or Faber-Castell Polychromos Pencils (Required \$12–\$20) would be fine. If you go with another set, be sure that it includes colors that are commonly found on maps. Some of you may find the watercolor colored pencils provide an extra bit of sophistication. A good source for both kinds of pencils is Dick Blick Art Supplies <<http://www.dickblick.com>>.

Some of you might also find Bryce (\$99.00 Mac & Win), Vue d’Esprit (FREE Mac & Win), and Ortelius (\$79 Mac only) useful and fun, but these are not required. Ortelius for Mac users is especially good, and many students in earlier iterations of this class have used it to good advantage.

## POLICIES

All of what follows is probably familiar to you, but I am explaining and stating these policies now, in the clearest possible terms, so there can be no dispute over what I expect. If you have questions about my expectations, please raise them. But whenever you ask me to modify my expectations because you failed to plan and use your time efficiently, you put me as well as the rest of the class in the ethically difficult position of applying different standards to different people.

### *Attendance*

Participants in a graduate seminar are expected to attend class unless some dire emergency arises—something on the order of a cosmic intervention. Because the class depends on class discussion of materials that are relatively unfamiliar to many, it is even more important that students come to class prepared to enter into lively debate. A word to the wise, in short, should be sufficient.

### *Enrollment*

Although this information is available in the Schedule, Students are responsible for verifying their enrollment in this class. Schedule adjustments should be made by the deadlines published in the Schedule of Classes. (Deadlines each semester are published in the Schedule of Classes available from the Registrar’s website <<http://registrar.gmu.edu>.) After the last day to drop a class, withdrawing from this class requires the approval of the dean and is only allowed for nonacademic reasons. Graduate students should consult with the Graduate Dean CHSS.

### *Students with Disabilities*

If you are a student with a disability and you need academic accommodations, please see me and contact the Disability Resource Center (DRC) at (703) 993-2474. All academic accommodations must be arranged through that office.

### *Honor Code*

To promote a stronger sense of mutual responsibility, respect, trust, and fairness among all members of the George Mason University community and with the desire for greater academic and personal achievement, we, the student members of the University Community have set forth this: Student members of the George Mason University community pledge not to cheat, plagiarize, steal, or lie in matters related to academic work.

### *Email*

Please check your GMU mailbox periodically or arrange for your GMU mailbox material to be forwarded to your preferred email address. In addition, be sure that your mailbox has not exceeded its capacity so that your mail bounces back to me. If I send out announcements, I use the GMU mailing class mailing lists per university regulations. If you need to email me, please put HIST 688 in the subject line and sign your

full name. This will help my spam detector route you to the proper folder, guarantee that I read your email, and ensure that I know who you are.

### *A Note on Computer Use*

Computers are a great boon to the graduate student. But, as with any technology, you must take steps to minimize the problems that computers inevitably cause. Do not expect to get through the semester without having at least one computer crisis. Prepare for this well in advance. Back up your work constantly and have alternative plans for obtaining computer use, if your primary options fail you. I will never accept computer problems as excuses for missed assignments. You must also keep backup copies of submitted assignments—either in electronic form or hard copy.

You must have consistent access to a computer and your software. “Consistent access” means that you can use the software and computer when you need to. This may mean working at your office or some other location. Last but not least, the books are in the bookstore; the web page will be available shortly and will include links to your classmates’ blogs as well as links to the various websites appearing on the syllabus. The latter makes finding the syllabus websites much easier. .

Computers and email also permit around-the-clock communication. If you have questions or need to apprise me of an emergency situation, contact me via email.

[ppetrik@gmu.edu](mailto:ppetrik@gmu.edu)

Should you need to discuss an issue with the instructor, contact me via email or by phone to make an appointment. Do not, however, expect an immediate response. Many of your questions can be answered by consulting the web site at:

<http://www.archiva.net>

Your best chance of reaching me immediately by email is during my office hours. Even then I cannot make a guarantee because I may well be with another student.

### *Grades*

Grades, including +s and -s, will be assigned in the following manner. REMEMBER THEY REPRESENT AN EVALUATION, NOT A REWARD. To rephrase Smith-Barney (now MorganStanley SmithBarney after several reincarnations), the investment folk, we do grades the old-fashioned way—earn them.

A—Outstanding work, complete mastery of the material presented, combined with some originality.

B—A solid command of the material with some gaps or mistakes in a basically sound essay or discussion.

C—Some knowledge of the material; mistakes and confusion are acceptable if mixed with some understanding. Not a reward for attendance or effort.

D—An incomplete and minimal knowledge of the material, major confusions and errors. F—A failure to present the material in a reasonably accurate and comprehensible manner.

I—There are no “incompletes” given in this course except in cases of bona fide and documented instances in accordance with the regulations of the university.

P—For a “pass” a “C” average is required.

If you receive a grade or criticism that seems unfair or if you desire further explanation, please feel free to discuss the matter with me by making an appointment. My policy is not to discuss grades via email.

## **REQUIREMENTS**

There are four preliminary assignments, one major assignment, and a blog required for the course. All of the assignments should either be part of a website (a web portfolio) that includes a home page and navigation to the various assignments or be included in your blog. (The instructor’s preference is for a website but understands that not all members of the class may have the necessary skills.) At the conclusion of each assignment, a link to the assignment should be forwarded to the instructor for inclusion on the instructor’s course page. In addition, you are required to make one post to your blog each week as well as one comment on another’s post each week. Those who make more than one comment will have their names writ in heaven, e.g. the gradebook. Reference your comment by furnishing

a text link (Comment on Steve's Post, #2: Great Comments on the Atlas) in your own blog to the permalink of the post.

The course assignments will be weighted as follows: (1) Historical Atlas Evaluation (15%); (2) Freehand Maps (15%); (3) "Rubber Sheeting" Project (15%); (4) Architectural Reconstruction (15%); (5) Blog—including posts and comments (15%); (6) Historical Atlas Project (25%); and (7) a self- evaluation (1 page, typed, single-spaced) assessing your performance in the course (not graded but required.)

1) Historical Atlas Evaluation (preliminary) The goal of this assignment is initial preparation for the final project, a two- or four-page layout on a topic for print version of a historical atlas. To that end, examine several online and print historical atlases and evaluate their effectiveness. Make some general comments about what seems to work in atlases. From one of the texts, choose a favorite topic and analyze why it was especially interesting. How do the maps contribute to the topic's text? What do the visuals other than the maps add to the presentation? How about the captions? Finally, assess the presentation: fonts, color, layout, and so forth. What is the word count of an average topical discussion? How many visuals and maps does an average layout use? Do the visual bleed to the edge of a page? Does the layout use a grid system? How does a focus on maps and other visuals illuminate history? Be sure to scan visuals to illustrate your discussion.

2) Freehand Maps (preliminary) This is a two-part assignment. First, select a map that has some relationship to a historical debate, event, or question. Using your colored pencils or other drawing materials, draw a freehand map that enlarges or reduces the original. (Drawing for this assignment does not include tracing.) Once you have finished the project, scan the result and include it in your project with all the necessary cartographic information. Use pencils, paper, rulers and so on the first part of the assignment—not a computer.

Second, select a map that you think might be successfully adapted to a history project. (A map that would not scan well (or a poorly scanned example), a large map from which you only need a detail, or map that needs clarification or reconstruction are good candidates.) Using Illustrator, draw the map and add it to your blog or portfolio. Again, be aware of cartographic conventions. Briefly reflect on your experience with the assignment in the text accompanying the maps.

3) "Rubber Sheeting" Project (preliminary) This project involves a technique variously called "rubber sheeting" or draping. First, go to one of the DEM purveyors and acquire a DEM of an area of historical interest. (A small area is usually preferable to an overly large one, and an area that has some elevation is preferable to a flat area.) Import the DEM into Natural Scene Designer and produce a scene. (Be sure to add trees and so forth if they are warranted.) Next, acquire an overlay (topo, ground cover, or one of the other options) and drape the layer over the DEM. Rotate the scene to a new perspective and repeat. Natural Scenery Designer does nice "flybys," so you might consider trying one. Once you have your minimum three images, include them in your portfolio and comment on your experience with the assignment, especially its applicability to history. What does recreating a historical topography suggest?

4) Architectural Reconstruction (preliminary) In preparation for the historical reconstruction, select a Sanborn Insurance map and several photographs of the area represented in the Sanborn map that suggests a place of historical interest or interpretation. (Although a b/w Sanborn map from GMU's electronic collection is perfectly acceptable, the colored versions are much more handsome; these are available from the LOC and other websites.) Second, select a neighborhood, building complex, or other area from the larger map. This portion of the Sanborn map will serve as the footprint for your architectural reconstruction. Finally, using SketchUp, reconstruct the historical area. Think carefully about how you want to present your reconstruction. Detailed? Schematically—something on the order of Monopoly houses? A combination of both? In the text accompanying your project, provide the historical background for your neighborhood, reflect on the process of completing the project, and discuss what you gained (or not) historically from creating an architectural reconstruction.

5) Historical Atlas Project (semi-final) The final assignment is a prototype of a four-page to six-page spread for a historical atlas on a particular topic. Although class discussion will describe more fully the requirements, the prototype should include several of the following:

1. a textual discussion of a historical spatial problem
2. a digital map or maps drawn or created by the author that demonstrate an understanding of cartographic principles and conventions
3. images or other visuals that illuminate, enhance, or illustrate the topic
4. a chart, graph, or table
5. a text or image document scan
6. captions for all images, maps, or other visuals (charts and graphs, for example)
7. attention to the requirements of print format: font, color, layout, image resolution
8. PDFs of pages added to digital portfolio or blog in PDF format

It's extremely important to get an early start on your historical atlas project. Let me say that again: start early. A project is the result of long hours and hard work. You can expect to spend at least eight hours each week on your work and more in the research phase. This is not said to spook you but to furnish a clear-sighted estimate of what is necessary. There are also print challenges involved in this project. You'll be using tabloid size paper and will need to use a print service. Believe me, your first historical atlas print job is never right the first time.

## SELF-EVALUATION GUIDELINES

Oftentimes, a letter grade does not reflect the effort that students put into a course, the amount a student has learned, or the skills that a student has acquired. A self-evaluation is one way of remedying this deficiency by illustrating and documenting your participation in the course from your perspective. This is the time to argue for yourself and put your best foot forward. In fact, it is in your interest to do the best job that you can on this assignment. The self-evaluation should be a one-page, typed single-spaced paper in which you address the following topics:

- I. Evaluation of your participation in the class
  - A. attendance
  - B. time devoted to the materials
    1. assigned/web visits reading
    2. blog posts
    3. preliminary projects
    4. final project
  - C. class participation
    1. seminar discussion
    2. blog comments
    3. final project planning & implementation
  - D. the ways in which you think you improved or not
    1. the problems you encountered in your effort to complete the class assignments to your satisfaction.
    2. what you would have done differently
    3. some of the skills or knowledge that you acquired
- II. A general assessment of how you will apply what you have gained (or not) from the class in the future