Teaching HGIS Online
The Geospatial Historian

Joshua MacFadyen
joshua.macfadyen@asu.edu
Assistant Professor
School of Historical Philosophical and Religious Studies and School of Sustainability
Teaching HGIS Online

- History at ASU Online
- GIS for Environmental History (NiCHE & Geospatial Historian)
- New research in Canadian agriculture & environment
“It is clear that online instruction can be effective. In most meta-analyses of controlled studies comparing learning outcomes for online and face-to-face instruction, those who learn online fare as well as, and sometimes even better than, those experiencing the instruction in face-to-face format.”

Video lectures

- Recorded lectures
Interactivity

- Threaded discussions
Interactivity
Interactivity
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<th>On-ground</th>
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</tr>
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<td>31</td>
</tr>
<tr>
<td>% Veteran</td>
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Place history, on-the-spot
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• GIS for Environmental History (NiCHE & Geospatial Historian)
• New research in Canadian agriculture & environment
Geospatial Historian
Open HGIS Lessons and Resources

About

The Geospatial Historian is a tutorial-based open access textbook, modeled on the Programming Historian, for historical scholars and digital humanists. It is designed to teach practical digital mapping and GIS skills that are immediately useful to real research needs.
Geospatial Historian
Open HGIS Lessons and Resources

Lessons
What is Historical Geographic Information Systems (HGIS)?

HGIS is a historical methodology that uses Geographic Information Systems (GIS) database and mapping software to analysis spatial change over time. For
Geospatial Historian
Open HGIS Lessons and Resources

ABOUT      LESSONS      BLOG      PROJECT TEAM      HGIS PROJECTS      FINDING SPATIAL DATA

Jim Clifford, University of Saskatchewan

Josh MacFadyen, Arizona State University

Daniel Macfarlane, Western Michigan University

Recent Contributors:
Geoff Cunfer, U Saskatchewan
Anne Janhunen, U Saskatchewan
Patrick Chassé, U Saskatchewan
Matt Todd, U Saskatchewan
Jessica DeWitt, U Saskatchewan

Alan MacEachern
Bill Turkel
Adam Crymble
For an overview of the methodology see Ian Gregory, *A Place in History: A Guide to Using GIS in Historical Research* (2002). For an example of a historian using HGIS to provide a new analysis of a major historical event, see Geoff Cunfer, *“Scaling the Dust Bowl”*.

Programming Historian Lessons (using free or open source software):

- **Lesson 1: Google Map Engine Lite and Google Earth**
- **Lesson 2: Installing QGIS and Adding Layers**
- **Lesson 3: Creating New Vector Layers**
- **Lesson 4: Georeferencing**

Currently out of date

Required revisions immediately after launch
The following lessons are being prepared for open peer review. They will be published on the Digital Tools page of the NiCHE website after the pass peer review. Please use the comments to make suggestions for improvements.

- **ArcGIS Lesson 1: Mapping Great Plains Population**
- **ArcGIS Lesson 2: Mapping Great Plains Agriculture**
- **ArcGIS Lesson 3: Georeferencing Maps**
- **ArcGIS Lesson 4: Digitizing Archival Maps**
- **ArcGIS Lesson 5: Overlay and Spatial Analysis**
Installing QGIS

Navigate to the [QGIS Download page](https://www.qgis.org). The procedure is a little different depending on your operating system. Click on the appropriate Operating System. Follow the instructions below.

**Mac Instructions**

- For most people it will be best to choose Master release (the one that has a single installer package). You will still need to install other software packages before installing QGIS. Under 4.2, click on the link ([KyngChaos Qgis download page](https://kyngchaos.com/qgis/mac-qgis-4-getting-started.html)) and download the following two files (see screen shot below): 1) GDAL complete 1.10 framework package (under Requirements) and 2) QGIS 2.0.1 (under Download) for your respective Mac OS (this works with Lion, Mountain Lion, and Snow Leopard – no word yet on using it with the forthcoming Mavericks). Install these like any other Mac programs.
Prince Edward Island Data

We will be using some government data from the Canadian province of Prince Edward Island. PEI is a great example because there is a lot of data for free online and because it is Canada’s smallest province, making the downloads quick!

Download PEI shapefiles:

- Navigate to the links below in your web browser, read/accept the license agreement, and then download the following (they will ask for your name and email with each download). We created the final two shapefiles, so they should download directly:

6. PEI Highways (alternate Tar file)
7. PEI Places (alternate Tar file)
GIS Data Layers

Downloading Instructions
- Click Download File:... and choose a directory and file name for the file.

File Information

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File: Coastline
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HGIS Course Project
Settled by Mormon pioneers in 1880, “Stringtown” emerged as one of Mesa’s earliest settlements—a linear district running south for a couple of miles along present-day Alma School Road.

Settlers dug an extension of the Mesa Canal canal bringing Salt River water to their farms. In 1883 they connected to a second irrigation channel— the Utah Extension Canal, which conveyed water from the Lehi community north of McKellips Road up onto the mesa.

Over the years, cottonwood trees proliferated, growing tall along these waterways. Known in Spanish as “álamo,” these trees gave rise to the name Alamo Avenue, which by 1884 had been renamed Alma Avenue for a Mormon prophet. Today the street is called Alma School Road. None of the dwellings from the settlement period survived waves of urban development, but traces of the growth can be seen in the nearby Landmark Restaurant.

Alma Ward Church
The Mission-style Alma Ward Church was constructed by the Mormon community along Alma School Road in 1908 with bricks made on-site, the church congregation existed over 25 years. A growing congregation resulted in the 1908 Alma Ward Church’s substantial expansion in 1937—an east-west addition appended to the north face of the original building enclosing the earlier entrance into the interior of
Course Project

• Rebuilding lost neighborhoods in the Salt River Valley

Of Food and Deserts
HGIS Course Project

• Phoenix Indian School
• Lost barrios, Tempe
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Joshua MacFadyen
Arizona State University
joshua.macfadyen@asu.edu

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