INSTRUCTOR
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COURSE OVERVIEW
This course will provide students with an opportunity to consider the major spatial processes in 20th century Philadelphia history using historical maps, Geographic Information Systems (GIS), and spatial analysis techniques. Specific topics will include industry, immigration, segregation, housing, public transportation, and urban renewal. Students will learn to develop and test research questions as well as the foundations of Geographic Information Science. The instructor and students will collaborate to build an historical GIS around a particular theme. Class sessions will be organized as weekly seminars and will combine lecture, discussion, lab, and studio time.

WEEKLY ASSIGNMENTS
Each week there will be an assignment relating to the material covered in the lab. All lab assignments will be posted on Blackboard under “Labs.” Assignments are due on Wednesday morning by 10:00 and should be deposited in the electronic drop box on Blackboard as MS Word files, unless specified otherwise. If you have difficulty using the drop box, assignments should be submitted as email attachments to ahillier@ssw.upenn.edu. The course assistant and instructor will be available to help you with these assignments. Feel free to seek help from your classmates, as well. If needed, you will have the opportunity to redo assignments, or parts of assignments, in order to improve your grade. The point is to learn!

You will need access to ArcView 8 software in order to complete these assignments. You can use the MMETS PC 2 Lab, the computer labs on the first floor of McNeil, or you can install ArcView 8 on your home computer. Getting to Know ArcGIS Desktop includes a 180-day copy of ArcView 8.1. You can also purchase a student copy of ArcView for $250.

You will receive a cd-rom with most of the data for the lab assignments, and the data will also be posted on Blackboard (under “Labs”). You will need to either purchase a zip disk (100M B or 250M B) or use an ftp, email, or server account to save your work. GIS files are larger than word processing files, so floppy disks will not provide enough space.

TRANSIT TRIPS
During the course of the semester, you will need to take a trip on one of Philadelphia’s public transportation lines and report back to the class on your trip. You may choose
any of the regional rail lines, Broad Street line, Market-Frankford El, Lindenwold High Speed line (to NJ) or one of the Subway Surface routes.

**SEMESTER-LONG PROJECT**
During the course of the semester, we will be building an historical transportation GIS for Philadelphia. Each of you will select an area of interest—trolleys, subways, parkways, or expressways—on which to focus. Your final project will consist of a series of digital map layers and an 8-10 page paper describing the impact that transportation development has had on Philadelphia.

**BOOKS**
The following books can be purchased at the Penn Book Center at 34th & Sansom Streets:

- *Philadelphia: Neighborhoods, Division, and Conflict in a Postindustrial City*, by Carolyn Adams, David Bartelt, David Elesh, Ira Goldstein, and William Yancey
- *Getting to Know ArcGIS Desktop*, by Timothy Ormsby et al.
- *Past Time, Past Place: GIS for History*, edited by Anne Kelly Knowles

All other readings—consisting of journal articles, chapters from books, and newspaper articles—are posted on Blackboard.

**Week 1 (1/14/04)**
**Introduction to Course**

- **Video:** “All Aboard for Philadelphia”
- **Lab:** Introduction to ArcView 8.3

**Week 2 (1/21/04)**
**Understanding Philadelphia History Through Spatial Analysis**

**Readings:**

- **Lab:** Georeferencing & spatial data, working with projections
Week 3 (1/28/04)

Transportation Overview

Readings:
- “The Subways, Railways and Stations of Philly,” by Harry Kyriakodis.
- “Historical Maps in GIS,” David Rumsey and Meredith Williams, pp. 1-18 in Past Time, Past Place: GIS for History.

Lab: Georectifying paper maps

Week 4 (2/4/04)

Trolleys & Streetcars (guest lecture or field trip)

Guest lecture: Joel Spival

Readings:
- “Route 15 Returns,” Janet Greenstein Potter
- http://www.phillytrolley.org/
- http://uchs.net/HistoricDistricts/wpsshd.html
- “Similarity and Difference in the Antebellum North and South,” Aaron C. Sheehan-Dean, pp. 35-49 in Past Time, Past Place: GIS for History.
- “GIS in Archaeology,” Trevor Harris, pp. 131-143 in Past Time, Past Place: GIS for History.

Lab: Attribute data, importing tables, levels of measurement, calculating values

Week 5 (2/11/04)

Historical GIS

Readings:
Lab: Point data, geocoding addresses, symbolizing points

Week 6 (2/18/04)
Subways

Readings:
- The Road from Upper Darby: The Story of the Market Street Subway-Elevated, by Harold Cox.

Lab: Area data, tabular and spatial Joins

Week 7 (2/25/04)
Transportation & Suburbanization

Readings:
- http://csiss.ncgia.ucsb.edu/classics/content/49
- “Statistical Maps, Data Scaling, and Data Classification,” pp. 159-185 in Mark Monmonier, Mapping it Out.

Lab: Printing & Exporting Maps

Week 8 (3/3/04)
Boulevards & Parkways

Readings:
- http://www.phillyroads.com/roads/roosevelt/
Lab: Queries, measurement, & buffers

Spring Break

Week 9 (3/17/04)
Expressways

Readings:
- “Planned Destruction: The Interstates and Central City Housing,” Raymond Mohl, pp. 226-245 in From Tenements to the Taylor Homes.
- http://www.pahighways.com/IHwys/I76.html

Lab: Geoprocessing & editing geography

Week 10 (3/24/04)
Cross-town Expressway

Readings:
- Tumbling, Diane McKinney-W hetstone
- http://www.phillyroads.com/roads/girard/
- http://www.phillyroads.com/roads/west-philadelphia/

Lab: Creating new geography through on-screen digitizing

Week 11 (3/31/04)
I-95 & the Delaware Expressway

Readings:
Lab: Spatial Analyst and 3D Analyst

**Week 12 (4/7/04)**

**Transportation Planning**

**Guest lecture:** Marlen Kokaz, GIS Director, Cartographic Modeling Lab

**Readings:**

**Lab: working session**

**Week 13 (4/14/04)**

**Role Play**

**Lab: working session**

**Week 14 (4/21/04)**

**Final Project Presentations**