CLS 125: Introduction to Geospatial Humanities

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Course summary

In this course, we will use geospatial tools, theory, and methods to explore "the humanities," broadly conceived. How can concepts like space, place, and landscape inform humanistic inquiry? What kinds of data exist for engaging computationally with topics like art, history, literature, and archaeology? And what tools can be used to geographically analyze the complicated relationships between people, the places they live, and the fruits of their creative endeavors?

Over the semester, students will learn to use geographic information systems—or "GIS"—to ask and answer humanistically-informed, historically-grounded spatial questions. Lectures introduce key concepts in the geospatial humanities, from spatial data structures to feminist cartography, while detailed labs put those concepts into motion. Assignments concentrate on self-guided engagements with course material, and a final project allows students to independently study a geospatial humanities topic of their own choosing.

Learning objectives and practical skills

Major learning objectives include:

- The coherence (or not) of geospatial humanities as a subset of the humanities in general
- Approaches and applications of GIS across the humanities
- Maps, mapping, and cartography as non-neutral, power-laden processes
- Methods and best practices for interacting with (digital) archives
- Spatial data structures, georeferencing, and geoprocessing
- Technical skills for problem solving in the context of spatial data
- Basic concepts in spatial databases and queries
- Principles of cartographic design (and when to deviate from them)
- The limits of representation and analysis in GIS

By the end of this course, students will gain the following skills:

- Identify data structures in spatial data
- Evaluate and select appropriate map projections and coordinate systems
- Identify, locate, evaluate, and acquire spatial data pertinent to projects in their field of interest
- Understand the data creation process and create historical spatial data sets derived from maps, gazetteers, aerial photography, texts, etc.
- Derive spatial data from tabular and textual information
- Use appropriate spatial analysis methods for raster and vector data, both independently and combined
- Create high-quality maps and associated graphics/visualizations with text that clearly communicate spatial information and the results of analysis
- Design an independent project that incorporates spatial analysis methods
- Use ArcGIS Pro software with strong proficiency

Grading & coursework details

Grading will be based on a 1000-point scale:

- 6 graded activities worth 150 points (25 each)
- 4 labs worth a total of 300 points (75 each)
- 4 skill-building assignments worth a total of 300 points (75 each)
- 1 final project worth 250 points

Activities

Nearly every week, we will spend time during class on some kind of activity. Six are graded, and the rest are simply part of your participation in the course. View all the activites here.

Labs

Throughout the semester, students will be assigned four labs which explore theories, concepts, and approaches in greater depth. Each lab weaves together methods and concepts, using them in a software application (usually ArcGIS Pro), and application to a particular area of the humanities. View all the labs here.

Assignments

Assignments concentrate on self-directed application of concepts explored in lectures and labs. View all the assignments here.

Final Project

Beginning officially in Week 8—although you can, and should, start to think about it earlier—you will begin working on a final project. Using concepts and methods learned in class, you will create a large-format infographic that presents original geospatial research into a humanities topic. Read more about the final project here.

There is no final exam in this class. Instead, we'll meet during exam week, during our standard class time, for a project exhibition.

Students may also choose to exhibit their work at Tufts' GIS Expo day for 10 points (1% of overall grade) of extra credit. The date is TBD, but the Expo will be held from 3-5pm in the Alumnae Lounge of Aidekman Arts Center (40 Talbot Ave). Examples of similar student projects can be found at Tufts GIS Expo Explorer.

Extension policy

I provide no extensions in this class. Instead, you may submit any graded coursework (with the exception of final projects) up to two weeks past the original deadline. All work submitted late will receive the following penalties:

- A 10% penalty the first day it's late
- A 1% penalty for each day additional day late, up to ten days excluding weekends, after which point you may no longer submit the work

For example:

- A 25-point activity turned in one week late would take a 15% penalty—minus **10%** for the first day plus 5% for each business day late
- A 50-point lab turned in two weeks late would take a 20% penalty—minus **10%** for the first day plus **10%** for each business day late
- A 50-point lab turned in one day late would take a 10% penalty—minus **10%** for one day
- A 75-point assignment turned in two days late would take a 12% penalty—minus **10%** for the first day plus 2% for each business day late

Required Readings

Many weeks, you'll have something to read in addition to, or in association with, some other activity (this is, after all, a "humanities" course just as well as a "geospatial" one). All readings are free, though some will require you to login to academic journal databases using your Tufts credentials.

Style Guidelines and Citation

All cartographic work should adhere, when appropriate, to key principles of map design as discussed in class. All written work should be consistent with the style guidelines of one of the major style guides. I have no preference for which one you choose—Chicago, MLA, and APA are all fine—but whatever you select must be applied consistently in your work.

Accommodations for Students with Disabilities

Tufts University values the diversity of our body of students, staff, and faculty and recognizes the important contribution each student makes to our unique community. Tufts is committed to providing equal access and support to all qualified students through the provision of reasonable accommodations so that each student may fully participate in the Tufts experience. If a student has a disability that requires reasonable accommodations, they should please contact the StAAR Center (formerly Student Accessibility Services) at StaarCenter@tufts.edu or 617-627-4539 to make an appointment with an accessibility representative to determine appropriate accommodations. Please be aware that accommodations cannot be enacted retroactively, making timeliness a critical aspect for their provision.

Schedule

Click here for a detailed schedule.