

SPRING 2019

GEOG 591 Geovisualizing change

Instructor: Dr. Arce-Nazario

Email: jarce@live.unc.edu

Time: TR 11:00-12:15

Office: 326 Carolina Hall

Phone: (919) 445-4844

Location: Carolina 322

Prerequisite: GEO370, or similar course, or experiences with GIS software.

Overview: This course will investigate the challenges, the tools and techniques, and the important applications of visualizing and analyzing geographic data that is temporally dynamic. We will tackle the technical challenges in obtaining, analyzing, and visualizing dynamic processes in space through maps, and discuss the consequences of our choices in how to represent and present these processes. By the conclusion of this course, students will have produced original geovisualizations of dynamic data related to their field of interest.

Objectives:

- proficiency identifying paradigms of analysis for spatial-temporal processes
- understanding of how GIS and temporal GIS models enable or hinder analysis
- proficiency in obtaining and cleaning historical data
- proficiency in creating and interpreting "change metrics"
- techniques for producing interactive and non-interactive maps of change



Map of Mississippi River meanders, Army Corps of Engineers, 1944 (gislounge.com/time-and-gis/)