



GST 104: Cartographic Design Lab Series

Lab 6: Using Color on a Map Effectively

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Introduction

This lab is part of a series of lab exercises designed through a grant initiative by the National Information, Security & Geospatial Technologies Consortium (NISGTC), funded by the United States Department of Labor in partnership with the Department of Education under the Trade Adjustment Assistance Community College and Career Training Grant Program (TAACCCT).

This mapping exercise challenges you to create a map of the United States using color effectively, based on what you learned in this course. You should consider what type of colors you will use, figure-ground relationship, when to use warmer or cooler colors, and so on.

Your instructor may require that you provide screen captures, lab reports and/or exported files. Please check with your instructor for the requirements specific to your class.

This lab includes the following task: Create Two Cartographically Well-Designed Maps of the United States

Objective: Use Color on a map effectively

In this lab, you will make and design two maps, based on map requirements provided to you. Pay special attention to your choice of colors on the map, especially considering your audience. You will then discuss your map design decisions and write a report reflecting on your observations.

Lab Settings

Required Virtual Machines and Applications

Windows Machine User Account	Train
Windows Machine User Password	Train1ng\$

1 Create Two Cartographically Well-Designed Maps of the United States

1. Log into the computer, using the information provided in the Lab Settings section.
2. A collection of geospatial data has already been downloaded for you to use. The data is located on the lab machine at: *Shared drive\GST 104\Lab 6*.
3. Create two maps based on the "Map Requirements" set forth below. The two maps should differ *significantly* in color choices.
 - a. One map could be full of multiple different hues.
 - b. The other map could be very stylized having just two hues with only alterations to value and/or saturation. Have fun with the second map, perhaps pick a theme (like Saint Valentine's Day), and choose colors to fit the theme.
4. Write a report discussing your map design decisions. Discussion points should include *at least*:
 - a. Map projection choice
 - b. Color choice
 - c. Layout
 - d. Label decision
 - e. Difficulties encountered.

Map Requirements

- Map Purpose: To educate the audience on the locations and names of all 50 states of the United States of America and large bodies of water. It is perfectly acceptable to displace the location of Alaska and Hawaii to condense the scale and extent of the map.
- Map Data: One place to find your own dataset is NationalAtlas.gov and NaturalEarthData.com. Browse these websites on your own PC to see what kinds of data are available. These are good sources for this type of data, although there are many other sources that would also be adequate for this type of project. We have gathered the data for this lab from NaturalEarthData.com.
- Map Audience: Elementary school students.
- Printed Medium Size: Maximum size: 8.5" x 11" for each map.

Conclusion

In this lab, you should have worked through the process of finding data, preparing it for use, designing a map layout, choosing appropriate colors and symbols, and labeling. Additionally, designing the map for elementary school children should have steered you towards making a clean, clear, easy-to-use map with exciting colors that will attract the attention of the young audience.