Instructor: Michael Siegel | **Email:** misiegel@rutgers.edu | **Office Hours:** Tuesday/Friday, 1:20-2:20

Course meets: Tuesday/Friday, 12:10-1:20 in the Geography teaching computer lab: Lucy Stone Hall, B266

Course Description

Advanced Cartography builds on the foundation knowledge and skills learned in Principles of Cartography. In addition to gaining additional experience with the principles of effective map design, we will be exploring color, which is a complex topic and a potentially powerful map design technique when used effectively. Although the emphasis will still be on designing maps for printing, other new components include an introduction to putting material online, and looking at how animation can be used to communicate geographic information.

Course Learning Objectives

- Gain a better understanding of how people perceive color symbolization on maps.
- Implement complex color map design with multiple types of symbols (exploring design strategies to achieve good contrast, figure and ground relationships, balance, and color harmony).
- Understand the need for planning and time estimates to meet a map project's production schedule.
- Explore a variety of production and duplication methods.

There will be three graded thematic mapping projects and two exams in this course.

Overview for three graded projects

Please refer to the project production schedule for specific due dates.

MAP PROJECTS:

1. You are responsible for developing three thematic maps that meet the instructor's approval.
2. Each map project should tell a story with an informative, and aesthetically pleasing presentation.
   The map projects must be technically challenging and should expand your design skills. Project grades will be determined by subject content, design, and technical execution.
3. Each stage of a map has a deadline (see production schedule). Your grade will be lowered for missed deadlines.
4. You should try to represent three quantitative and/or qualitative data sets related to the topic.
5. Projects will be page size (fill the available area of an 8.5 x 11 page) and in color.
6. Each version of the map project should be put on your personal webpage in raster format (you will learn how in class), and the Illustrator file should be submitted through in Canvas.

PROJECT PARAMETERS:

1) New Jersey, 2) After 1980, 3) Before 1980; Scale: **1) small, 2) medium, 3) large**.

A "New Jersey" topic (statewide or larger scale) will be your first project.

A topic from a time period "After 1980" will be your second project topic. You can not choose a topic which is currently ongoing.

A topic from a time period "Before 1980" will be your third project topic.

Map scale is relative, so the scale of your 2nd project just needs to be larger or smaller than your 1st project, and the scale of your 3rd project needs to be different from that of your 1st and 2nd projects.

The second and third projects should not be on a theme based in New Jersey like your first project.

The parameters are meant to encourage variety in the content and cartographic design of your projects, but they are fairly flexible as long as you get the topic approved.

Ironically, sometimes it seems more difficult to settle on a topic when you are allowed to come up with it on your own. Keep a few things in mind that might help narrow the universe of choices down to a more manageable scale.

- Is there data available that you can use to create a map?
- Is there enough data/related variables to allow you to design an information rich project?
- Can you visualize what kind of symbolization you will use?
- Can you describe that vision to your instructor?
- Topics that involve the whole world are not great for class projects just because of the time it takes to symbolize data for so many countries and the challenges of using available space effectively.

You will be required to submit an abstract of the topic and a self-critique for each project. In your self-critique, identify the parameters that each project fulfilled.

[Here is a link to some Advanced Cartography student projects from previous years. (Links to an external site.)](#)