

Fall 2009  
CEIE 410/510

## Geographic Information Systems for Engineers

### Homework 1 - Mapping and Cartography.

*Part I: Due in class on September 7th*

*Part II: Due in class on September 14th*

#### **Part I:**

Read and comprehend the material distributed (supplied or posted on the web) in the first class on Aug 29th. Make sure you know what to expect from the class and what I expect from you. Furthermore, you have to be familiar with the ground rules to make students' and instructor's lives easy during the next 16 weeks.

Submit your Exercise 1 sheets

**Part II:** For this part, you will explore USGS Maps in Mason Library and provide some information from these maps. These maps are available in the main library in large drawers on the right hand as you enter. I expect you to explore as many maps as you possibly can. Specifically, explore the following two drawers with following labels:

- 1 Reservoirs and Dams
- 2 Virginia

In there, you will find 1:100,000 and 7.5 quads and maps containing some PLSS references. Using the following guidelines, study the map of Arlington OR Fairfax from the Virginia drawer, and any ONE map from the Reservoirs/Dams drawer.

- Look for cartographic references/topics we talked about on 8/31/2009 and 9/7/2009 classes;
- Observe the symbology used for various features.
- Copy each of the legends on to two or three 8 ½ x 11 sheets.
- On these copies, highlight the cartographic references that match with what we talked about in the class. Write any observations you may have on these copies or on a separate paper.
- List the features presented in each map (example: highways, contour lines etc.)