Lab 3: "Advanced Techniques for Cartographic Representations" by ESRI

Assigned date: Oct. 30, 2018 | Due date: Nov. 6, 2018
Total credit: 40 points

Introduction

This lab provides useful exercises to design many types of symbology for a map based on digital cartography by using ArcGIS. This ESRI instruction of the virtual campus course, **"Advanced Techniques for Cartographic Representations"** provides very specific and detailed steps to follow based on ArcGIS user interface. The entire course includes three exercises that may need approximately 75 minutes to complete. For this Lab 3 **all three exercises** are required.

How to access the virtual campus course

Just like when you did the Labs 1 and 2, refer "**Esri ELearning Instructions.pdf**" posted under the Lab1 folder on the BeachBoard. There are 12 steps you can follow to start taking the ESRI e-learning course for this lab. Especially, in the **Step 9** use key words "Advanced Techniques for Cartographic Representations" to find the course for the lab 3. Then continue to follow the rest of the steps 10-12.

Exercise 1: Create and manage overrides

1. Read the contents of the **INTRODUCTION** of the Advanced Techniques for Cartographic Representations training course until you will get to the **Exercise 1**: "Create and manage overrides".
2. Complete the 7 steps of the Exercise 1 of the course by following the ESRI Virtual Campus instruction. When you finish the last map of each of the **Steps 3, 6, and 7**, export **the last map** as a **PNG** image file with at least **300 DPI** resolution from ArcMap. In total, you will export **3 map images**.

Q1. Include the three exported map images in the lab 3 report with appropriate titles—for example, Step 3, Step 6, and Step 7. Save your lab 3 report.
(14 points = 5 points X 2 maps + 4 points X 1 map)

Tips: To include the images in your lab report, open a new Word document, click on **Insert tab in Word > Picture button**, and choose the image from your USB drive. Then the image will be inserted in your word document.

Q2. Save your **MXD file** created by finishing the last step of the Exercise 1 and **submit it to the dropbox. (2 points)**

Exercise 2: Refine representations using geoprocessing tools

1. Complete the 5 steps of the Exercise 2 of the course by following the ESRI Virtual Campus instruction. When you finish the last map of each of the **Steps 4 and 5**, export **the last map** as a **PNG** image file with at least **300 DPI** resolution from ArcMap. In total, you will export **2 map images** from the Exercise 2.

Q3. Include the 2 exported map images that you created from the Exercise 2 in your lap3 report, too, with appropriate titles—for example, Step 4 and Step 5. Then save your lab report as **a PDF document to reduce the file size and submit the PDF document to the dropbox. (10 points = 5 points X 2 maps)**
DO NOT submit the map images. Your lap report includes them.

Q4. Save your **MXD file** created by finishing the last step of the Exercise 2 and **submit it to the dropbox**. **(2 points)**

Exercise 3: Manage representations efficiently

1. Complete the 5 steps of the Exercise 3 of the course by following the ESRI Virtual Campus instruction. When you finish the last map of each of the **Steps 4 and 5**, export **the last map** as a **PNG** image file with at least **300 DPI** resolution from ArcMap. In total, you will export **2 map images** from the Exercise 3.

Q5. Include the 2 exported map images that you created from the Exercise 3 in your lap3 report, too, with appropriate titles—for example, Step 4 and Step 5. Then save your lab report as **a PDF document to reduce the file size and submit the PDF document to the dropbox. (10 points = 5 points X 2 maps)**
DO NOT submit the map images. Your lap report includes them.

Q6. Save your **MXD file** created by finishing the last step of the Exercise 3 and **submit it to the dropbox**. **(2 points)**

- In total, you will submit **1) one lap report in PDF that includes 7 map images and 2) three MXD files** to the dropbox of Lab3.

Good job! You finally finished Lab 3!
If you have any questions, feel free to let me know.