**Geography (GEOG) 403/704 Spring 2022**

**Lab Four**

**Introduction to TerrSet/IDRISI**

**20 points**

Name: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Goal: The purpose of this exercise is to introduce you to the TerrSet program and its imbedded IDRISI image processing system.

 **Use the TerrSet ON-LINE Tutorials for this exercise, listed below**. **The TerrSet tutorial is under the “Help” Menu (accessible from the “File” tab of the main command bar of the software interface). ALWAYS READ THROUGH THE ENTIRE LAB HANDOUT BEFORE BEGINNING YOUR COMPUTER SESSION!**

**Note:** It is expected that you will carefully consider and be sure you understand all the material presented in the assigned tutorials. It will be crucial knowledge for later exercises.

**Requirements:** You will be answering several questions below, and also turning your memory stick with several files that you will create as you work through the tutorials. Label your memory stick with your name and put the Lab 4 files in an appropriately named folder.

1. The TerrSet System Environment (1-1)–work through this tutorial found on pages 4 to 11.
2. Display: Layers and Group Files (1-2)–work through this tutorial found on pages 12 to 16.
	1. Use “save” in the composer to save your results from step F) as a Windows bitmap named: SIERRAFOREST.BMP
3. Display: Layer Interaction Effects (1-3)–work through this tutorial found on pages 17 to 21.
	1. in step F), LAKES is added to your final composition from step E), save your final result of step g) as: BLENDS\_TRANS.BMP
	2. save you final output SIERRA457 in step H) as: SIERRA457.BMP
	3. get 3-D glasses from your TA
4. Display: Surfaces–Fly Through and Illumination (1-4)–work through this tutorial found on pages 22 to 24.
5. Display: Navigating Map Query (1-5)–work through this tutorial found on pages 25 to 29.
6. Map composition (1-6)–work through this tutorial found on pages 30 to 35.
	1. save your WESTBORO composition as WESTBOROUGH.BMP.
7. Palettes, Symbols and Creating Text Layers (1-7)–work through this tutorial found on pages 36 to 40.
	1. save your Ethiopia composition as ETHIOPIA.BMP.
	2. Question: Describe the purpose of the blend function in Symbol Workshop.
8. Data Structures and Scaling (1-8)–work through this tutorial found on pages 41-46.
9. Database Workshop: Working with Vector Layers (1-9)–work through this tutorial found on pages 47-50.
10. Database Workshop: Analysis and SQL (1-10)–work through this tutorial found on pages 51-53.
	1. Question: Do the “Challenge” on page 53, what is the SQL expression? (1pt. extra cr.).
11. Database Workshop: Creating Text Layers/Layer Visibility (1-11)–work through this tutorial found on pages 54-55.

**WHEN YOU HAVE COMPLETED ALL THE ASSIGNED TUTORIALS ABOVE:**

Turn in the 5 BMP files along with a WORD file with your answers to the two questions above, as instructed by your TA.

**ACCESS TO CAMPUS VIRTUAL LAB**

Use the link below and follow the detailed instructions. When successfully completed, you will be using your local computer as a terminal to run programs remotely on a campus computer lab PC. As indicated, you must have the VPN installed and activated to successfully access these PCs.

<https://uwm.edu/technology/remote-computer-labs-for-students/>

# TerrSet/IDRISI ACCESS AND USE IN MIT 353 (and virtual lab)

1. Enter you ePantherID and password as instructed on the screen to login to the PC (already done when using the virtual lab).
2. The TerrSet/IDRISI program is in program list within the “start menu”.
3. In File Explorer, check that the C:\temp\Geog403 folder exists and is empty. If not, create it.
4. In order to get exercise files from the class OneDrive folder:
	1. Go to the “Lab files (.zip)” section of the class lecture Canvas page (all the way at the bottom) and select the .zip file for the desired exercise.
	2. Download the selected .zip file, using “Save As” into the C:\temp\Geog403 folder.
	3. After you unzip the .zip file, you should now have access to the files for the exercise you wanted to work on in the C:\temp\Geog403 sub-folder.

5. In TerrSet, open “TerrSet Explorer” click on the “Projects” tab, and then click on the name of the working folder until it is highlighted. Now Click on the “three dots”. The “Browse for Folder” function should appear. Move to the C:\temp\Geog403 folder and click “OK”. You are now setup to have C:\temp\Geog403 serve as your “working folder” in TerrSet/IDRISI.

6. Be sure to save your work (to some other location) between different computer sessions.