

## ES492/592 GIS Applications - Final Lab Portfolio Checklist – Due at Final Exam, Wed. March 21, 2007

**In a neat, professional-looking 3-ring binder that is well labeled (tab dividers are nice), include a printout of the following class activities, in the prescribed order:**

(on each print out, include the exercise no., your name, and related map information)

### **In-Class / Lab Exercises / Tutorials**

#### *Quick Start Tutorial for Image Analyst*

- (1) Ex. 1 Image enhancement of Moscow
- (2) Ex. 2 Identification of Oil Spill map
- (3) Ex. 3 Alignment of seattle road image with seattle feature map
- (4) Ex. 4 Image difference / change map (p. 33)
- (5) Ex. 4 Image from (p. 39)
- (6) Ex. 5 Image mosaic (p. 41)

#### *Tutorial: Attribute Data Entry and Management*

- (7) Task 1 entering attribute data
- (8) Task 2 linking tables
- (9) Task 3 joining tables
- (10) Task 4 attribute data classification
- (11) Task 5 attribute data computation

#### *In-Class Exercise - Geoprocessing Functions with ArcView*

- (12) print out of clip map (p. 3 of notes)
- (13) print out of merge map (p. 3 of notes)
- (14) print out of dissolve map (p. 3 of notes)

#### *In-Class Exercise - Editing Polygons Using ArcView*

- (15) print out of polygon splitting / reshaping exercise

#### *Data Display Tutorial*

- (16) Task 1 - print out of chloropleth map
- (17) Task 2 - print out of map design exercise
- (18) Task 3 - print out of text labelling exercise

#### *Data Exploration Tutorial*

- (19) Task 1 - charts and map (overview)
- (20) Task 2 - results of attribute data query
- (21) Task 3 - results of relational database query
- (22) Task 4 - combining spatial and attribute queries
- (23) Task 5 - Raster Data Query

#### *In-Class Exercise on Map Algebra*

- (24) Print out of ArcView map algebra exercise
- (25) Hand-written results of map algebra exercise (grid1xgrid2, grid1/grid2, grid1+grid2, grid1-grid2, log(grid1), grid1x333)

*Image Rectification Tutorial*

(26) Palm Springs Image Realignment Exercise (p. 136-145 of tutorial)

(27) Resampling of Palm

*Tutorial on Avenue Scripting and Spatial Interpolation*

(28) Task 1 - grid results of trend.ave script

(29) Task 2 - results from density estimation

(30) Task 3 - grid results from spatial interpolation

(31) Task 4 - grid results from comparison

(32) Task 5 - grid results from kriging

**Getting to Know ArcView Tutorial**

**\*\*Print out all projects from the final chapters in the ArcView Tutorial\*\*** (on each print out, include the exercise no., your name, and related map information)

Chapter 18

Chapter 19

Chapter 20

Chapter 21

Chapter 22

Chapter 23

Chapter 24

**FINAL PROJECT CHECKLIST**

Task 4 – Subbasin Theme Map

Task 5 – Subbasin Dissolve Map

Task 6 – Subbasin-Watershed-USGS Quad Map

Task 7 – Stream clip/overlay Map

Task 8 – Results of Watershed Measurements (data table)

Task 9 – UTM Map Output

Quad DRGs

Quad DEMs

Vegetation Map

Soils on DEM

Bedrock Geology on DRG

Road map on Geology

Stream Map on Precipitation

Stream Map on Vegetation

Task 10 – Digital Orthophoto Quad Maps

Task 11 – Results of elevation data analysis (data table)

Task 12 – Watershed Poster

Task 13 – Data CD with Metadata