**Digital Portfolio Instructions:** 

Outline of Content:

- I. Title Page with name, class, instructor, stylized cover graphic related to GIS
- II. Table of Contents with checklist of portfolio contents, in order prescribed by Professor; use task numbers identified on checklist below.
- III. Provide a title page for each exercise or weekly assignment bundle in the portfolio; use task numbers identified on checklist below.
- IV. Provide a title page for multi-page exercises, especially the text tutorials; use task numbers identified on checklist below.

Compile PDFs into one combined document, not as Adobe bundled attachments. Make your portfolio document a stand-alone, readable file that can be easily posted to the web. Combine your individual documents into one portfolio file

File Naming Convention for your portfolio submission: Lastname\_ES341\_Midterm\_Portfolio.pdf

Upload to Moodle; Midterm Portfolio due Friday February 15, 2013; 5 PM

# Week 1

Task 1A. Read Clarke (2003) Introduction to GIS Chapter

http://www.wou.edu/las/physci/taylor/es341/clarke\_ch1.pdf

Task 1B. Complete Introduction to Topgraphic Maps Exercise (Monmouth Quad)

http://www.wou.edu/las/physci/taylor/es341/mapintro.pdf

Task 1C. Complete in-class lat-long conversion / PDF creation / Email attachment exercise

http://www.wou.edu/las/physci/taylor/es341/lat long decimal conversion in class.pdf

Task 1D. Complete Introduction to Contouring and Digital Elevation Models Exercise <a href="http://www.wou.edu/las/physci/taylor/es341/intro">http://www.wou.edu/las/physci/taylor/es341/intro</a> contouring dem.pdf

## Week 2

Task 2A. Complete Basics of Vector-Raster Data Exercise

http://www.wou.edu/las/physci/taylor/es341/vecrasex.pdf

Task 2B. Introduction to Contouring and Digital Elevation Models

http://www.wou.edu/las/physci/taylor/es341/intro contouring dem.pdf

Task 2C. Work on Price Text Chapter 1 (GIS Data) Reading and Tutorial Exercises
Read p. 9-23, Answer chapter review questions (p. 24) 1, 2, 3, 6; work through Mastering Skills Tutorial p.
25-39 answering all the embedded questions, complete exercises 1-6 and 10 on p. 40. Screen capture each significant outcome of the skills tutorial and include in PDF portfolio submission. Place short-answers to embedded questions on a 1-page MS-word document, convert to PDF (do not scan all of the Mastering Skills

Pages)

Task 2D. Week 1-2 Lab Deliverable Moodle Test Submission (Due by 5 PM, Wed. Jan. 16)

Log on to moodle... https://online.wou.edu/

Task 2E. In Class Raster Grid Exercises, "Vector Data Model" Class Notes

http://www.wou.edu/las/physci/taylor/es341/vector.pdf

- -p. 3 Geometric Elements and Topology
- p. 4 scaling exercise
- p. 6 Root mean Square Error Exercise

Task 2F. Introduction to Georeferencing, Map Themes and Spatial Associations

http://www.wou.edu/las/physci/taylor/es341/Intro Map Themes Layers.pdf

### Week 3

Task 3A. Read Clarke (2003) Chapter 3 – GIS Data formats

http://www.wou.edu/las/physci/taylor/es341/clarke\_ch3.pdf

- Task 3B. Read Clarke (2003) Chapter 2 Map Projections
  - http://www.wou.edu/las/physci/taylor/es341/clarke\_ch2.pdf
- Task 3C. In-Classes Exercises from "Map Projections and Coordinate Systems" Note Set <a href="http://www.wou.edu/las/physci/taylor/es341/project.pdf">http://www.wou.edu/las/physci/taylor/es341/project.pdf</a>
  - -p. 2 In-Class Exercise: Spatial Scales and Digital Image Resolution
  - -p. 4 In-Class Exercise Measuring Great Circle Distances on the Globe
- Task 3D. In Class Raster Grid Exercise, p. 3 "Raster Data Structure" Class Notes http://www.wou.edu/las/physci/taylor/es341/raster.pdf
- Task 3E. Work on Price Text Chapter 2 (Mapping GIS Data) Reading and Tutorial Exercises
  Read p. 41-52, Answer chapter review questions (p. 53) 1, 2, 3, 8, 9, 10; work through Mastering Skills
  Tutorial p. 55-69 answering all the embedded questions, complete exercises 1-10 on p. 70. Screen capture
  each significant outcome of the skills tutorial and include in PDF portfolio submission. Place short-answers to
  embedded questions on a 1-page MS-word document, convert to PDF (do not scan all of the Mastering Skills
  Pages).
- Task 3F. Work on Price Text Chapter 3 (Presenting GIS Data) Reading and Tutorial Exercises
  Read p. 71-83, Answer chapter review questions (p. 84) 3, 5, 7; work through Mastering Skills Tutorial p.
  85-98 answering all the embedded questions, complete "Exercise" at bottom of p. 98. Screen capture each significant outcome of the skills tutorial and include in PDF portfolio submission. Place short-answers to embedded questions on a 1-page MS-word document, convert to PDF (do not scan all of the Mastering Skills Pages).

#### Week 4

- Task 4A. Complete Key Word Review Exercise
  - http://www.wou.edu/las/physci/taylor/es341/gis intro concept key word exercise.docx
- Task 4B. Complete "Managing Oregon Map Projections in Arc Map" tutorial exercise http://www.wou.edu/las/physci/taylor/es341/Managing Projections in Arc Map.pdf
- Task 4C. Work on Price Text Chapter 11 Reading and Tutorial Exercises (Map Projections)

  Read p. 295-309, Answer chapter review questions (p. 310) Q1-9; work through Mastering Skills Tutorial p. 311-325 answering all the embedded questions, complete exercises 1-7 on p. 326. Screen capture each significant outcome of the skills tutorial and include in PDF portfolio submission. Place short-answers to embedded questions on a 1-page MS-word document, convert to PDF (do not scan all of the Mastering Skills Pages).

### Week 5

- Task 5A. Work on Price Text Chapter 4 (Attribute Data) Reading and Tutorial Exercises

  Read p. 99-112, Answer chapter review questions (p. 113) 1, 2, 3, 5, 7, 9, 10; work through Mastering Skills

  Tutorial p. 114-127 answering all the embedded questions, complete exercises 1,2,3,4,5,6,8,10 on p. 127-128.

  Screen capture each significant outcome of the skills tutorial and include in PDF portfolio submission. Place short-answers to embedded questions on a 1-page MS-word document, convert to PDF (do not scan all of the Mastering Skills Pages).
- Task 5B. Work on Price Text Chapter 5 (Queries) Reading and Tutorial Exercises

  Read p. 129-140, Answer chapter review questions (p. 141) 1, 2, 3, 6, 8, 9, 10; work through Mastering Skills

  Tutorial p. 142-153 answering all the embedded questions, complete exercises 1-9 on p. 154. Screen capture
  each significant outcome of the skills tutorial and include in PDF portfolio submission. Place short-answers to
  embedded questions on a 1-page MS-word document, convert to PDF (do not scan all of the Mastering Skills
  Pages).

### Week 6

Task 6A. In-Class Exercise – Joining Data Tables and Exporting of Feature Classes <a href="http://www.wou.edu/las/physci/taylor/es341/table\_join\_export.pdf">http://www.wou.edu/las/physci/taylor/es341/table\_join\_export.pdf</a>

Study for Midterm Exam, Wed. Feb. 13; Complete/compile digital lab portfolio due Friday Feb. 15, 5 PM (Moodle Upload)