## ES302 Quantitative Methods Spring 2016 Final Lab Portfolio Checklist (Updated June 3, 2016)

## NOTE: Digital Midterm Lab Report for Moodle Upload Thursday June 9, 11 PM

Complete the following lab exercises, scan, and compile in digital lab report PDF format (cover page, table of contents, individual lab title sheets), organize your work in the following order:

Final Exam Wednesday June 8, 12 PM

- 1. Scaling and Map Drawing <a href="http://www.wou.edu/las/physci/taylor/g302/Intro-scale-map-drawing.pdf">http://www.wou.edu/las/physci/taylor/g302/Intro-scale-map-drawing.pdf</a>
- 2. Scaled Map of Classroom

http://www.wou.edu/las/physci/taylor/g302/class map exercise.pdf

- 3. Large Scale Format Photo Scale Exercise http://www.wou.edu/las/physci/taylor/g302/large format photo ex.pdf
- 4. UTM Location Exercise

http://www.wou.edu/las/physci/taylor/g302/utm exercise.pdf

5. Waltham Chapter 5 Problems Trigonometry Applications (Q. 5.1, 5.2, 5.3, 5.5, 5.6)

http://www.wou.edu/las/physci/taylor/g302/waltham chap5 trig.pdf

6. Introduction to the Three-Point Problem

http://www.wou.edu/las/physci/taylor/g302/three pt problem intro.pdf

7. Pittsburgh Coal Three-Point Problem

http://www.wou.edu/las/physci/taylor/g302/three pt.pdf

8. Measuring Map Areas Using the Planimeter

http://www.wou.edu/las/physci/taylor/g302/measuring scaled map areas.pdf

9. Watershed Delination and Map Area Measurement

http://www.wou.edu/las/physci/taylor/g302/watershed\_delineation\_drainage\_area\_exercise.pdf

10. Introduction to Rose Plots

http://www.wou.edu/las/physci/taylor/g302/intro rose plots.pdf

11. Application of Ternary Diagrams to Geologic Problems (Part 1 QFL Diagram, and Question 6.4)

http://www.wou.edu/las/physci/taylor/g302/ternary.pdf

12. Introduction to Stereographic Projections

http://www.wou.edu/las/physci/taylor/g302/stereo\_graphic\_projections.pdf

http://www.wou.edu/las/physci/taylor/g302/ES302\_In\_class\_ex\_intro\_stereonets.pdf

13. Introduction to Geostatistics and Data Analysis

http://www.wou.edu/las/physci/taylor/g302/stat\_ex.pdf

http://www.wou.edu/las/physci/taylor/g302/dataanal.pdf

14. In-Class Introduction to Excel and Equation Functions

Siltstone-Sandstone Hillslope Data Summary

Excel Analysis of Sandstone Point-Count Data and Ternary Plot

15. OPTIONAL EXTRA BONUS: Relationships Between Geologic Variables (Waltham Ch. 2: Q 2.1, 2.2, 2.3, 2.8, 2.11) http://www.wou.edu/las/physci/taylor/g302/waltham2.pdf

16. OPTIONAL EXTRA BONUS: Introduction to Contouring and Interpolation

http://www.wou.edu/las/physci/taylor/g302/ES302 contour interpolation.pdf