ES301 Final Portfolio Grade Sheet Name _____

Grapher Tutorial
  Scatter plot / line plot
  Scatter plot / point modification
  Scatter plot with labels
  Scatter plot with lines, points, labels
  Combination Line / Bar Graph
Lab Exercise Ternary Diagrams
  QFL Data renormalization / hand plot
  Grapher QFL Diagram
  Waltham Ternary Plot Exercise (7 plots of petrologic chemistry data)
Surfer Tutorial
  Demo Contour Map (data, grid, map)
  Demo Contour Map with Color Fill
  Demo Wireframe Map
  Demo Wireframe with Color Fill Zones
  Demo Post / Contour Map Overlay
  Demo 3D Surface Map
Surfer DEM Lab Exercise
  DEM / contour map of Monmouth quad
  Marys Peak Contour Map
  Marys Peak Shaded Relief
  Marys Peak Vector
  Marys Peak Contour / Vector Overlay
  Hometown quad contour map
  Hometown quad shaded relief
  Hometown vector map
  Hometown quad contour / vector overlay
Geostatistics Reading Questions
  Intro questions
  Frequency raw/% calculations
  Intro / definition questions
Geostatistics Example Problems
  Temperature frequency distribution
  Grapher bar-freq. diagram
  Grapher scatter plot
  Stat. summary calculations
  Excel Frequency Distribution
  Excel Cumulative Frequency Distribution
  Excel Weighted Mean Calculations
  Normal Distribution Sketch Graph
  Excel Regression Equation / Line Fit
Hillslope / Data Analysis Lab
  Example histogram / frequency calculations
  Example T-test analysis
  Appalachian Hillslope Data Statistical Summary
  Appalachian Hillslope Data T-Test
  Appalachian Hillslope Written Summary / Concluding Questions
Final Integrated Lab Project
  Task1
    Mt. Bachelor Contour Map 10-ft
    Mt. Bachelor Contour Map 20-ft
    Mt. Bachelor Shaded Relief 335 sun azimuth
    Mt. Bachelor Shaded Relief 200 sun azimuth
    Mt. Bachelor Wireframe
    Mt Bachelor Contour/Vector Overlay
  Task 2
    Rose Diagram / fracture data
  Task 3 – Appalachian Morphometry Exercise
    X-Y Plot of Drainage Area (y axis) vs. Slope (x axis) Fernow Area (with linear regression)
    X-Y Plot of Drainage Area (y axis) vs. Slope (x axis) North Fork Area (with linear regression)
    X-Y Plot of Drainage Area (y axis) vs. Slope (x axis) Little River Area (with linear regression)
    X-Y Plot of Valley Width (y axis) vs. Distance from Divide (x axis) Fernow Area (with linear regression)
    X-Y Plot of Valley Width (y axis) vs. Dist. From Divide (x axis) North Fork Area (with linear regression)
    X-Y Plot of Valley Width (y axis) vs. Dist. From Divide (x axis) Little River Area (with linear regression)
    Rose Diagram of Hillslope Aspect Fernow Area
    Rose Diagram of Hillslope Aspect North Fork Area
    Rose Diagram of Hillslope Aspect Little River Area
    Polar Plot of Slope Gradient vs. Aspect Fernow Area
    Polar Plot of Slope Gradient vs. Aspect North Fork Area
    Polar Plot of Slope Gradient vs. Aspect Little River Area
    X-Y Plot of Slope Length (y axis) vs. Hillslope Gradient (x axis) Fernow Area (with linear regression)
    X-Y Plot of Slope Length (y axis) vs. Hillslope Gradient (x axis) North Fork Area (with linear regression)
    X-Y Plot of Slope Length (y axis) vs. Hillslope Gradient (x axis) Little River Area (with linear regression)
    Hillslope Statistical Summary Data

  Task 4 – Newberry Cone Analysis
    Cone Distance between cone 1 and cones 2-296
    Cone Azimuth between cone 1 and cones 2-296