Economics 180 Dr. Tom Means

Spring 2014 DUE May 6, 2014

Econ 180 Homework Assignments

To receive one unit of credit you must complete the following by the end of the semester. <u>Due date is May 6, 2014</u>. Turn in a binder with the set of homework problems on each of the topics listed below. I have some empty binders available. **Your binder will include a table of contents, a xerox copy of the textbook title page, a xerox copy of the actual homework problem, and the excel printout showing your solution.** Sample binders are available in my office to look at. You may use the text from your statistics class. The printout page will provide the excel function you used to solve the problem. The problems can be solved using the excel function, data analysis and/or the KADD add-ins using the PC version of excel. You can download the KADD version from my faculty page.

Homework Topics with # of required problems in parentheses

Charts and Graphs (3) – Pie Chart, Box plot, and Histogram of data.

Descriptive Statistics (1) – use data analysis program to produce summary stats.

<u>Discrete Distributions</u> (3)– Solve probability problems using Binomial, Poisson, and Hypergeometric distribution.

<u>Continuous Distribution (1)</u> – Solve a probability problem using the normal distribution.

<u>Confidence Intervals (6)</u> – Select data to produce a confidence interval for the population mean using z and t distribution. Do the same also for population proportion. Repeat for two-sample problems (sample mean and proportion)

<u>Sample size (2)</u> – Calculate sample size for population mean and proportion.

<u>Hypothesis Testing (6)</u> – Select data to test hypotheses using z-test, t-test for sample mean, and sample proportion(z-test only). Do the same for two-sample data using sample proportion and sample mean (z-test, and t-test assuming equal variances).

Chi-Square Tests (2) – Select data to perform a Goodness-of Fit test and Test of Independence.

<u>Simple Regression (1)</u> – Select data to estimate a simple 2-variable regression model.