

### **Instructors Overview of Basic Statistics, Regression Analysis, and ANOVA Using R**

Course materials are provided to give an introduction to the use of R for forestry data by example. The exercises include a description as a .doc file, the data provided as an EXCEL file, which is also saved as a .txt file, and R script to use in analyzing the data.

All students should do the Basic Statistics and Simple Linear Regression Exercises which tell students how to download R, find documentation, bring data in, and other important steps to analyzing data using R. The other exercise that should be done is graphs using R (Exercise 2), as graphs can be very useful in finding patterns in data.

As well as these two exercises, there are five others that can be used:

- Multiple Linear Regression Using R (Exercise 3)
- Using R and Stepwise Methods to Select Predictor Variables in a Regression Model (Exercise 4)
- MLR Using R, Extra Exercise
- Experiments Using a Completely Randomized Design, One Factor Using R (Exercise 5)
- Experiments Using a Completely Randomized Design, Two Factors (Exercise 6)

As well as the R exercises, background notes on regression analysis and on simple experimental designs are give as .pdf files.