Statistics 5303  
Spring 2016  
Lab #3

We begin with general questions and answers.

We have historically had quite a few questions regarding R at about this point in the course, so today we will do some more practice with R.

**Help**

- Finding help within R.
- Finding R documentation on line.

**Data entry and organization**

- Data frames vs ordinary variables
- Variables inside and outside a frame with the same name. Which one are you getting?
- Deleting variables.
- Using `attach` and `detach`. How does that change what variables you get?

**Packages**

- What goes wrong if you don’t load `cfcdae` before you do your `lm`?

**Factors**

- Why use a factor?
- How to tell if a variable is a factor?
- Levels of a factor.

**lm**

- Using a data frame versus using “ordinary” variables.
- Using `update()` to change a model.
- Using `as.factor()` within the `lm` model formula.
- Using polynomial terms.

**After lm**

- What are quirky differences in arguments of `model.effect`, `linear.contrast`, `effect`, `allEffects` etc?