# Statistics for Geography (GEOG 533) Lab 0

For this lab we'll be using the <u>swirl</u> software package for R in order to illustrate some key concepts. The swirl package turns the R console into an interactive learning environment. Using swirl will also give you the opportunity to be completely immersed in an authentic R programming environment.

#### 1. Install swirl

Since swirl is an R package, you can easily install it by entering a single command from the R console:

#### install.packages("swirl")

If you've installed swirl in the past make sure you have version 2.2.21 or later. You can check this with:

packageVersion("swirl")

### 2. Load swirl

Every time you want to use swirl, you need to first load the package. From the R console:

library(swirl)

## 3. Install the R Progroamming course

swirl offers a variety of interactive courses, but for our purposes, you want the one called R Programming. Type the following from the R prompt to install this course:

install\_from\_swirl("R Programming")

## 4. Start swirl and complete the lessons

Type the following from the R console to start swirl:

### swirl()

Then, follow the menus and select the R Programming course when given the option. For this lab, you should complete the following lessons:

- 1. Basic Building Blocks
- 2. Workspace and Files
- 3. Sequences of Numbers
- 4. Vectors
- 5. Missing Values
- 6. Subsetting Vectors
- 7. Matrices and Data Frames
- 8. Logic
- 9. Functions

If at any time you want to quit swirl, just type bye() in the R console. For more information on swirl, visit <a href="http://swirlstats.com">http://swirlstats.com</a>.