

Introduction to R for Life Scientists

Summer 2012

Instructor : Kenichi Okamoto

Meeting Time and Place : 4-4:50 Tuesday/Thursday, DC 102

Office : Thomas Hall 1545

Office Phone : 919-515-1651

Office Hours : Wednesday 4PM-5:30 PM, Thursday 11 AM - 12:30 PM

email : kenichi.okamoto@ncsu.edu

Course objectives: To develop skills for analyzing, interpreting, and summarizing data in R. At the end of the course, students will prepare a short presentation that covers the data analysis they performed, presents some of their main results in both graphs and tables, and highlights their interpretation of the data.

Course Schedule:

5/22 : Getting started in R

5/24 : Graphics in R

5/29 : Summary Statistics and common tools for univariate statistical analysis in R (e.g., tests for normality, comparing means/variances, etc...)

5/31 : Linear and nonlinear models in R

6/5 : Experimental design and sample-size determination with R

6/7 : Writing your own functions in R

6/12 : R packages for ecology projects

6/14 : R packages for molecular evolution and systematics projects

6/19 : Break to work on projects

6/24 : Project presentations

6/26 : Project presentations