

Syllabus

17 August	Introduction to R
22 August	Introduction to R, part 2
24 August	Introduction to R, part 3; problem set
29 August	Plotting concepts
31 August	Plotting in R; problem set
5 September	Sampling design
7 September	Statistics fundamentals; problem set
12 September	Hypothesis testing
14 September	Type I and Type II errors; problem set
19 September	p -values and confidence intervals
21 September	Best practices
26 September	Assumptions of tests, review for exam
28 September	Exam 1: Fundamentals of statistics, using R
3 October	Equality of means; problem set
5 October	Equality of variance
10 October	ANOVA; problem set
12 October	Correlation
17 October	GSA: No class
19 October	Regression; problem set
24 October	Resampling and the bootstrap; problem set
26 October	Likelihood & Bayesian statistics
31 October	Problems and review
2 November	Exam 2: Common univariate and bivariate tests, using R
7 November	Multiple regression
9 November	Non-linear regression
14 November	Principal components analysis
16 November	Multidimensional scaling
21 November	Projects
23 November	No class: Thanksgiving break
28 November	Discriminant function analysis & review
30 November	Exam 3
5 December	No class: UGA following Friday schedule

The course syllabus is a general plan; deviations by the instructor may be necessary and will be announced to the class.

Contact information

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Office Hours: Tuesday & Thursday, 11:00–3:00; Wednesday 12:00–3:00; *other times by appointment only*

Grades

20% Exam 1: Using R and the fundamentals of statistics

20% Exam 2: Common univariate and bivariate tests

20% Exam 3

20% Problem sets and quizzes

20% Course Project

Course Materials

Crawley, M.J., 2014. *Statistics: An Introduction Using R*, 2nd edition. Wiley, New York, 360 p. ISBN-13: 978-1118941096.

All students should install R on their personal computers. R is available for macOS, Linux, and Windows systems at <http://www.r-project.org>

The course website is <http://stratigrafia.org/8370>.

Policies

All students must abide by the UGA Student Honor Code: “I will be academically honest in all of my academic work and will not tolerate academic dishonesty of others.” *Academic dishonesty will be reported to the UGA Academic Honesty office.* A Culture of Honesty, which describes the University’s policies and procedures for handling cases of suspected dishonesty, can be found at honesty.uga.edu.

Attendance is not required, but students are responsible for learning the material covered in missed classes. The lectures are not delivered via video or recorded; however, the course notes on the website are extensive. If you miss class, you should read these notes carefully and get class notes from another student.

A 10-point penalty will be assigned on grades for late problem sets and projects, per 24-hour period after the time at which the assignment was due.

Make-up examinations may be permitted at the instructor’s discretion by advance arrangement in cases of professional travel, illness, or other serious issues.