ESM 244: Advanced Data Analysis in Environmental Science & Management
Winter 2014

Instructor: Allison Horst
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Class Times: Tuesday/Thursday 1:00pm – 2:15pm
Bren Hall 1414

Office Hrs: TBD (will be posted on course GauchoSpace site)

Description: This course will cover advanced topics in statistics (non-parametric methods, bootstrapping, transforming data, non-linear models, multivariate statistics, time-series analysis) and data analysis (organization, analysis, interpretation, and communication) using real-world environmental data from online databases and from past and ongoing MESM group projects. There is no lab for this class, but assignments will be completed in R or other suitable programs (tutorials in R will be posted as necessary on GauchoSpace for new topics).

Assignments: Graded assignments will be assigned weekly or biweekly. There will be several tutorials posted to GauchoSpace that will not be graded, but should be completed individually. For group assignments, all members of the group are expected to contribute to, and understand, the entire assignment submitted. Assignments may involve oral presentations.

Exams: There will be a midterm exam and a final exam.

The midterm date is TBD, and will be posted on the course GauchoSpace site. The midterm will involve a take-home portion and may require an oral presentation in class.

The final exam will be a take-home assignment and will be DUE on the final day of class (Thursday, March 13th).

Grading: Assignments (50% total)
Midterm (20%)
Final (30%)

Materials: There is no reader or textbook for this course. All necessary materials will be posted on the course GauchoSpace site. Bring a notebook, calculator, and pen or pencil to each class.