Goals: The objective of this course is to provide a forum for doctoral students from around campus to present and discuss research related to their thesis that involves the application of statistics to real-world problems. Space permitting, postdoctoral researchers may also participate in this seminar course. Research having some connection to my interests in the environmental sciences are especially welcome, but students from all fields of inquiry, including all doctoral candidates in Statistics with an applied component to their research, are encouraged to participate. Past offerings of this course have included participants from statistics, the environmental sciences, ecology, biochemistry, planetary sciences and psychology. In addition to learning to present their research in an informal manner to a diverse audience, students will engage in open-ended discussions of the research of the other students in the class. Students can expect to advance their own research and to improve their general understanding of how to productively and appropriately apply statistical methods to substantive problems.

In order to encourage discussions among all the participants in the class, I am going to enforce a strict rule that (other than the presenter, of course), **no one may have an open computer, phone or other electronic device open during class time**. All students are expected to participate in the class discussions, even if all you have to say is "When you say X, I don’t know what that means.”

Expected background: Students should be currently working on a research project that includes a substantial component of the statistical analysis of real data. A solid background in statistics is desirable for students outside of Statistics, but is not essential as long as there is a willingness to learn new statistical ideas as needed to apply appropriate statistical methods to their research.

Web page: All handouts (including this one) will be posted on the course website, although this may be the last handout.

Homeworks: There are no specific assignments for this course. Students are expected to present their ongoing research on an irregular basis throughout the semester. Each student will make at least four presentations during
the semester, but perhaps more depending on the size and interests of the class.

For the first class meeting on September 12, I would like each student to provide a brief overview of the substantive problems their research is meant to address and the data they will be using and/or collecting to address these problems. Students should know how the data they are using were/will be collected and to what extent they are suitable for addressing the relevant substantive problems.

These overviews should be understandable to the entire class, so be careful to explain any disciplinary jargon you use. You should not go into details of statistical modeling and analysis in these initial presentations; you will have plenty of time to do that in later presentations. You may, if you wish, use up to two slides for your presentation, but I encourage you to use the blackboard as much as possible.

**Lectures**: There will be no formal lectures, although I may occasionally give brief presentations on statistical issues of broad interest to the class.

**Grading**: Grading for the course is Pass/Fail and is based entirely on class participation.

**Office hours**: I will be available after lectures on Mondays and can make arrangements to meet online with students at other times if needed.

**COVID-19 protocols**: As you know, Rutgers is requiring everyone to wear masks that properly cover their mouth and nose during class meetings. Wearing a mask during lectures is a requirement for this class.

**Academic Integrity**: All students are responsible for locating, reading, and abiding by the University Policy on Academic Integrity for Graduate Students. The policy is available on-line at http://academicintegrity.rutgers.edu/. Specifically,

a) You must properly acknowledge and cite all use of the ideas, results, or words of others.

b) You should properly acknowledge all contributors to a given piece of work.

c) You must treat all other students in an ethical manner, respecting their integrity and right to pursue their educational goals without interference. This requires that a student neither facilitate academic dishonesty by others nor obstruct their academic progress (taken from http://academicintegrity.rutgers.edu/academic-integrity-at-rutgers/).