Course Description
Anthropogenic climate change presents some of the biggest questions faced by modern society. Economics can provide a powerful intellectual foundation for understanding and analyzing many of these questions. This course covers the tools and insights from economic analysis that inform upon our understanding of climate change impacts, the design of mitigation and adaptation policies, and the implementation of these policies. The course is centered on key conceptual ideas from environmental and natural resource economics but will also draw from other fields in economics as they pertain to climate change. The quarter is broken into two sections. During the first half of the course, students will develop mastery of economic concepts relevant for climate change and acquire tools, both theoretical and empirical, for conducting economic analyses of climate impacts and policies. The second half of the course will hone student ability in applying these insights and tools in simulated policy situations involving literature reviews, critical evaluation of existing research, and original empirical analyses. The goal is to help students become informed and critically-minded practitioners of climate policy.

Prerequisites and Workload
Introductory microeconomics (ESM 251), environmental economics (ESM 204), and statistics (ESM 206) are required. Typically, this course is recommended only for 2nd year MESM students or 1st year MESM students with comparable prior coursework. Familiarity with statistics and modeling in R is preferred and will be developed throughout the course.

Expect about 5-6 hours of work per week. Preparation for each class will entail 2-3 reading assignments (~40 pages total) throughout the quarter. The first part of the course will be on learning material and as such will be evaluated through problem sets and a midterm exam. The first six weeks prior to the midterm will contain 4 problem sets due at the start of every Tuesday’s class. This is followed by an in-class midterm exam during Week 7. The second part of the course focuses on examining case studies and conducting a research project. Students are encouraged to see me during office hours starting in Week 8 about the research project. Each class from Weeks 8 to 10 will involve a particular case study in which 2 students are assigned to present opposing arguments using economic reasoning and best available empirical evidence. The remainder of class time will be allotted to student presentation of research reports.

Readings
Most readings will be academic journals. There is one required book for this course:

Grading
1) Problem sets (4x5): 20% 2) Midterm: 35% 3) Case study debate : 10% 4) Research paper + presentation: 25% 5) Attendance: 10%