# ENVIRONMENTAL AND RESOURCE ECONOMICS II ECG 716, SPRING 2017 M/W, 1:30-2:45, 1202 Burlington Labs

Zack Brown, 4310 Nelson Hall, <u>zack\_brown@ncsu.edu</u> Laura Taylor, 4220 Nelson Hall, laura taylor@ncsu.edu

# **Course Description**

This course is designed to provide students with a working knowledge of a selected set of current analytical techniques and an understanding of how they are applied in the design and evaluation of public policies aimed at management and conservation of environmental systems. The course focuses on learning technical methods and understanding major open research questions in the field, with the central aim of guiding students towards new research and potential dissertation topics.

The course is split into two modules, with the first being taught by Zack Brown and the second by Laura Taylor. Topics covered in the first sub-module will focus on 'environmental microeconometrics,' and will include general discrete choice econometric models used in environmental valuation before moving to focus on stated preference methods. The second section focuses on revealed preference settings, hedonic methods and program/policy evaluation.

## **Prerequisites**

ECG715 or permission of the instructor.

#### **Required Text and Software**

There is no text you will be required to purchase. Links to required readings will be posted on the course website

Here are some good reference textbooks related to the course (some chapters from which will be assigned and provided during the course):

Freeman III, A. M. et al. (2014). <u>The Measurement of Environmental and Resource Values:</u> Theory and Methods. RFF Press.

Kanninen, B. – ed. (2007). <u>Valuing Environmental Amenities in Stated Choice Studies</u>. Springer.

Train, K. (2009). Discrete Choice Methods with Simulation. Cambridge University Press.

There are two software packages we will use in this course: Matlab and Stata. Matlab is available free for students through NCSU. Stata must be purchased, but a temporary license can be purchased as a student for approximately the price of a textbook. If you are in a position to do so and are planning on using the econometric techniques you learn in this course in your dissertation or future research, we recommend you purchase Stata/IC Perpetual License, which is \$198.

#### **Communication & Office Hours**

The best way to communicate with us is via email. We will also need you to provide us with your preferred email address (one that you check most frequently). Our schedules are erratic due to meetings and work-related travel, and so we do not keep set office hours. However, we are happy to meet with you at any time convenient for you. Send us an email or stop by our offices and we will schedule a meeting convenient for you.

#### **Evaluation**

In this course, you will practice a variety of skills that are integral components of being a professional economist. These include (1) econometric analysis of data, (2) synthesizing research literature; (3) evaluating the research of others; (4) developing viable research questions and approaches for answering the questions; (5) attending seminars and giving feedback to others on their work;.

In addition to gaining technical skills, it is critical that you are able to write clear, logical and compelling arguments and present those arguments to an audience. There will be assignments to help develop these skills and give you feedback on where you are relative to a professional.

Evaluation is as follows:

- (1) A midterm worth 35%. The exam may include both in-class and take-home components.
- (2) A research proposal (paper) worth 35%.
- (3) Problem sets and paper reviews for Module I 15% total
- (4) Ouizzes, problem sets or paper reviews for Module II 15% total.

# **POLICIES**

#### **Attendance policy**

If you must miss class for excused reasons on one of the mid-term or quiz days, inform us no later than two weeks (4 class periods) in advance, so that we can arrange an alternative time for you to take the exam.

Attendance at all TREE seminars is required for all students, and attendance at CEnREP colloquia is required for NCSU students. You may miss one of each. TREE seminars are at 3:15 on Thursday afternoons at RTI; CEnREP Colloquia are from 12:00-1:00 on Fridays. The dates, time & location of these presentations are posted at: <a href="www.ncsu.edu/cenrep/workshops/">www.ncsu.edu/cenrep/workshops/</a>. NCSU students: you will be given the opportunity to meet with speakers while they are on campus. As a professional economist, we expect you to make use of such opportunities.

There is a common expectation that you will attend class having read assigned readings beforehand. We will be as specific as possible about the readings. If attendance in the class wanes significantly or if we get the impression you have not been reading the articles, we will modify the grading scheme to reflect this unfortunate turn of events.

### Late-work policy

For take-home assignments, no credit will be granted for work turned in after the due date, unless the student emails the instructor – and clears the late submission – in advance. For late work cleared in advance, the student has one week after the due date to turn the assignment in. Otherwise, no credit will be granted.

#### **Code of Student Conduct**

All students are bound by the Code of Student Conduct which governs academic integrity at North Carolina State University. Therefore, students are required to review the definitions of academic dishonesty to avoid behaviors which are in violation of this code. In submitting an assignment, students consent that he/she neither gave nor received unauthorized aid. Students who violate the code of student conduct will receive zero points for that assignment only. Please see the website for a full explanation of the University Code of Student Conduct <a href="http://www.ncsu.edu/policies/student\_services/student\_discipline/POL11.35.1.php">http://www.ncsu.edu/policies/student\_services/student\_discipline/POL11.35.1.php</a> Unexcused assignments submitted late may be graded on a reduced criteria, at the discretion of the instructor.

### **University Policy on Incompletes**

The NCSU policy on incompletes can be found in the *Graduate Handbook*. Please review this policy – incompletes will be given only when a student makes a formal request and when appropriate documentation accompanies the written request for an incomplete. Please see the university's policy, available at <a href="http://www.ncsu.edu/grad/handbook/sections/3.18-grades.html#I">http://www.ncsu.edu/grad/handbook/sections/3.18-grades.html#I</a>.

### **University Non-discrimination Policies**

It is the policy of the State of North Carolina to provide equality of opportunity in education and employment for all students and employees. Accordingly, the university does not practice nor condone unlawful discrimination in any form against students, employees or applicants on the grounds of race, color, religion, creed, sex, national origin, age, disability, or veteran status. North Carolina State University regards discrimination on the basis of sexual orientation to be inconsistent with its goal of providing a welcoming environment in which all its students, faculty, and staff may learn and work up to their full potential. The University values the benefits of cultural diversity and pluralism in the academic community and welcomes all men and women of good will without regard to sexual orientation.

Reasonable accommodations will be made for students with verifiable disabilities. In order to take advantage of available accommodations, students must register with Disability Services for Students at 1900 Student Health Center, Campus Box 7509, (919) 515-7653. For additional information, see <a href="http://www.ncsu.edu/provost/offices/affirm\_action/dss/">http://www.ncsu.edu/provost/offices/affirm\_action/dss/</a>. For more information on NC State's policy on working with students with disabilities, please see <a href="http://www.ncsu.edu/policieis/academic\_affairs/courses\_undergrad/REG02.20.1.php">http://www.ncsu.edu/policieis/academic\_affairs/courses\_undergrad/REG02.20.1.php</a>

#### **End of Semester Evaluations**

Online class evaluations will be available for students to complete during the last 2 weeks of each semester. Students will receive an email message directing them to a website where they can login using their Unity ID to complete evaluations. All evaluations are confidential;

instructors will not know how any one student responded to any question, and students will not know the ratings for any instructors.

Evaluation website: <a href="https://classeval.ncsu.edu/">https://classeval.ncsu.edu/</a>

Student help desk: <a href="mailto:classeval@ncsu.edu">classeval@ncsu.edu</a>

More information about ClassEval: <a href="http://www.ncsu.edu/UPA/classeval/">http://www.ncsu.edu/UPA/classeval/</a>