# EC 391: Introduction to Econometrics

Professor: Allison Luedtke

August 26, 2019

### 1. Course Information

- Instructor: Allison Luedtke
  - Email: aluedtke@smcvt.edu
  - Office Hours: Tuesdays 10:00 2:00 or By Appointment
- Meeting Times: MWF 9:45 10:50
- Textbook(s):
  - Introductory Econometrics by Jeffrey M. Wooldridge
  - (Optional) Mastering 'Metrics by Angrist and Pischke
- Important Dates: (Tests)
  - Test 1: Friday September 20
  - Test 2: Friday October 18
  - Test 3: Friday November 15
  - (Cumulative) Final Exam: TBD
- Important Dates: (Project)
  - Question Paragraph Due: Friday October 4
  - Data Description Due: Friday November 1
  - Introduction Due: Monday November 18
  - Project Presentations: Friday December 6
  - Paper Due: Friday December 6

# • Grading:

- Tests 1, 2, and 3: 20% each

- Homework: 5%

- Project Presentation: 5%

- Paper: 10%

- Final: 20%

## • Laptops:

 Laptops are fine. I reserve the right to change this position at any point throughout the semester if they become disruptive.

## 2. Course Outline

## Section 1: Probability and Statistics

- Introductions, Syllabus, Overview of Econometrics
- Probability
- Statistics
- Simple Regression
- Test 1: Probability and Simple Regression

## Section 2: Multiple Regression

- Multiple Regression: Estimation
- Multiple Regression: Inference
- Test 2: Multiple Regression

### Section 3: Functional Forms

- Functional Forms
- Binary Variables
- Interaction Terms
- Heteroskedasticity
- Test 3: Functional Forms

### Section 4: Fun Econometric Topics

- Time Series Data
- Panel Data
- Big Data Methods

#### **Cumulative Final Exam**