

Notes on Exam 2:

1. The syllabus consists of all the material that we have covered since the first exam. However, there are some concepts that we learned prior to the first exam and continue to use.
2. There will be about 7 questions with subparts.
3. Please bring a calculator.
4. It will be in-person on Monday, May 6 at 11 a.m. in the usual room.
5. Please attempt all questions so that I can at least try to give you partial credit wherever necessary.
6. There will be no questions on Stata commands.
7. The statistical tables on AsU Learn will be provided. There will be no formula sheet.
8. Although you are expected to study everything, please take a look at the outline below.
9. Answer questions concisely. Don't worry about writing out full sentences.

Outline:

1. Chapter 6
 - a. Quadratic and interaction terms
2. Chapter 7
 - a. Dummy independent variables
 - i. Interactions among Dummy Variables
 - ii. Allowing for Different Slopes
 - b. Linear probability model
3. Chapter 8
 - a. Heteroskedasticity
 - i. Consequences
 - ii. Heteroskedasticity-Robust Inference
 - iii. Testing
 - iv. Weighted Least Squares

Note: I won't be asking questions on heteroskedasticity tests and weighted least squares.
4. Chapter 17
 - a. Logit and Probit
 - i. Latent variable framework
 - ii. Maximum likelihood estimation
 - iii. Interpretation of marginal effects

Note: I won't be asking questions on setting up the likelihood function.
5. Chapter 13
 - a. Pooling Independent Cross Sections across Time
 - b. Two-Period Panel Data Analysis – first differencing
 - c. More than Two Time Periods – first differencing
6. Chapter 15
 - a. Instrumental Variables – Simple Regression Model

Note: Pay attention to the conditions required for an instrumental variables (IV) approach. Pay attention to the concepts of instrument exogeneity, instrument relevance, and weak instrument. Also, I won't expect you to memorize the formula for IV standard errors but may ask questions on its interpretation.