Consolidated Notes Final Exam Econ 300

The following is intended to cover major topics you should understand for exam 3

Causal Inference / Potential Outcomes Framework

You should be able to

- Understand the definition of Rubins causality
- Be able to distinguish between the different types of treatment effects

Difference-in-Differences

- Write the regression equation for a DID model
- Be able to interpret each of the coefficients in a DID regression
- Understand what does and does not bias a DID design
- Know how to test for the identification assumption for DID
- Calculate DID coefficients when given a table of values
- Understand the benefits DID provides over simple bivariate regression

Regression Discontinuity

- Write the regression equation for an RD model
- Be able to interpret each of the coefficients in an RD model
- Understand what does and does not bias an RD design
- Understand ways in which the base RD model can be extended and why
- Understand the benefits RD provides over simple bivariate regression
- Understand what an RD estimate measures

Residual Knowledge

- Understand the basics of bivariate OLS regression, including bias and what $\hat{\beta}_1$ represents