ECO 5350   Prof. Tom Fomby
Introductory Econometrics   Fall 2015

TOPICS TO CONSIDER
FOR FINAL EXAM

The Final Exam in this class is scheduled for Thursday, December 10, 3:00 – 6:00 pm in Room 195 Crow. Don't spend a whole lot of time memorizing formulas. For the exam I will make available to you the formulas on the front and back covers of your Hill, et. al. textbook. You should commit to memory the ANOVA table I presented in class. You will not be able to use your i-phone or personal calculator during the exam. We will be providing you a 4-function calculator if you need it for elementary calculations.

In terms of other hints I would suggest that you go over the Mid-term review document that is posted on the class website, the Mid-term Exam Key and the keys to all QQs and Exercises. The final exam is cumulative (approximately 60% since mid-term and 40% on the mid-term material) so that you will need to review all previous material. Since the mid-term we have covered Exercises 5 – 9 with Exercise 9 being discussed in class but not handed in and QQs 6 – 10.

Since the last mid-term we have covered:

- **Heteroskedasticity**, its effects on least squares estimates, using residual plots to diagnose heteroskedasticity, tests for heteroskedasticity like the White's test, transforming a heteroskedasticity regression equation to an equation with homoscedastic errors and then running OLS (i.e. Weighted Least Squares), Aitken's Theorem, White's heteroskedasticity-robust standard errors and t-statistics for the OLS estimates (Chapter 8). As another example of the application of weighted least squares I discussed in some detail the Linear Probability Model. See Section 8.6. Also I will send through your e-mail account the Power Point for this chapter (8).

- **Multiple Regression on time series.** (See Chapters 9 and 12 in your textbook plus the PPTs I sent to you on these chapters.) The phenomenon of spurious regression, stationary versus non-stationary time series, random walks without and with drift, Augmented Dickey-Fuller tests for unit roots, building an ARDL(p,q) time series model on stationary variables using the AIC and SBC goodness-of-fit criteria. See the SAS programs spurious.sas, spurious2.sas, and spurious3.sas for additional discussion of the spurious regression problem. (Especially see the notes in the programs.)

- Study the idea of **impact, interim and total multipliers** that are inherent in the explanation of the dynamics between a dependent variable and explanatory variable in a time series regression.

- I am expecting you to have at least a rudimentary understanding of the idea of **cointegration** and the generalization of the ARDL(p,q) model to **the ECM model** implied by cointegration. See Chapter 12 in your textbook and the accompanying PPT.