Wilf Csaplar Jr. Economics 350 Homework #3 **Due Friday 2/8**

Place your name on the back of this sheet of paper and nowhere else. Staple your answers on the front of this sheet of paper. Failure to follow these directions will cost you 10 points. Turn in the Excel file via Canvas. Place your name on an otherwise blank page of the Excel file. Your assignment will be typed, except graphs can be drawn by hand and mathematical equations can be done by hand. Failure to type it will cost you 10 points. If you use double-sided printing or print on the back of scrap paper, I will give you one additional point.

All questions except for #3 should be done before class. You will hand all of the answers in together.

1) (15 points) Explain how we measure total factor productivity (A in the production function). Explain why the Solow residual is affected by labor hoarding.

2) (35 points) Draw the labor supply/demand diagram and the LRAS/SRAS/AD diagram. Use it to explain how the Real Business Cycle Model (a.k.a. Neo-Classical) explains the business cycles. What does it predict about the cyclicality of the real wage and inflation? Which one is wrong?

3) Use the page on the Excel Sheet (Lab3), tab "Lab" to answer this question.
A) (15 points) Calculate the Laspeyres CPI for each year using every year as a base year. In other words, you will have 36 entries – six years (2011 - 2016) with each of the six base years.
B) (5 points) Calculate the inflation for each of the five years which it can be calculated for.
C) (10 points) Compare your results in Part B for the base years of 2012 and 2015. Why do you think they have such different results? Explain your logic in a box typed in on the Excel file.
D) (10 points) Calculate the Paasche price index for each year with 2013 as the base year. Calculate the inflation rate using this data.
E) (10 points) What is the PCE for every year using 2013 as the base year? Calculate the inflation rate for every year.