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 1 point. 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.

1) (15 points) Explain  $\frac{\overline{Y} - Y}{\overline{Y}} = 2(u - u)$ . You can treat the first term as one variable after you define it.

Explain the 2 (why isn't it = 1) as well as the u and  $\bar{u}$ . (Normally, you will not explain parameters like the 2.

- 2) (20 points) Draw the labor supply and demand diagram. Illustrate the effect of an improvement in technology. Explain why the curve(s) moved as drawn. What happens to the real wage and the level of employment?
- 3) (20 points) Draw the labor supply and demand diagram. Illustrate the effect of an increase in the expected future taxes. Explain why the curve(s) moved as drawn. What happens to the real wage and the level of employment?
- 4) (15 points) Explain how the income and substitution effects affect the NS curve. Given the way you drew the NS curve in the previous questions, which effect is stronger? Explain your logic.
- 5) (20 points) Draw the intertemporal budget constraint. Illustrate the effects of an increase in the stock market. Explain why the curve moved as drawn.
- 6) (10 points) I believe it was in late 2013 when the unemployment rate went down and it was perceived as a bad sign, even though the unemployment rate was too high. Explain why the drop was perceived as a bad sign.