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) (10 points) Explain uc = $(r + d)p_K$.
- 2) (20 points) Use the MPK^f/uc_K diagram to explain why an increase in the depreciation rate will have an ambiguous effect on the level of investment. Explain the economic intuition as to why this is true.
- 3) (35 points) Draw both the MPK^f/uc_K diagram and the S/I diagram. Illustrate the effects of an increase in the price of capital. Explain why the curve(s) moved as drawn. What happens to the desired amount of capital, the level of investment and savings, and the interest rate?
- 4) (35 points) Draw both the MPK^f/uc_K diagram and the S/I diagram. Illustrate the effects of an increase in government spending. (Assume that Ricardian Equivalence does not hold.) Explain why the curve(s) moved as drawn. What happens to the desired amount of capital, the level of investment and savings, and the interest rate?