Wilf Csaplar Jr.   Economics 302   Homework #4   **Due Thursday 2/26**

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) (20 points) Explain $I_t = K_{t+1} - K_t + dK_t$. Explain K_{t+1}, both K_t, and d.

2) (35 points) Draw the MPK^f/uc_K diagram and the S/I diagram. Illustrate the effects of an increase in the price of capital on both diagrams. Explain why the curves moved as drawn. What happens to the user cost of capital, the desired amount of capital, and the interest rate? Only look at primary effects. In other words, if the movement of one diagram causes a movement on the second diagram and that movement causes a movement on the first diagram, disregard that small secondary effect on that graph.

3) (35 points) Draw the MPK^f/uc_K diagram and the S/I diagram. Illustrate the effects of an increase in the government spending on both diagrams. Assume Ricardian Equivalence does not hold. Explain why the curves moved as drawn. What happens to the user cost of capital, the desired amount of capital, and the interest rate? Only look at primary effects. In other words, if the movement of one diagram causes a movement on the second diagram and that movement causes a movement on the first diagram, disregard that small secondary effect on that graph.

4) (10 points) Explain why an increase in the depreciation rate will have an ambiguous effect upon the amount of investment.