

This review sheet is intended to cover everything that could be on the exam; however, it is possible that I will have accidentally left something off. You are still responsible for everything in the chapters covered except anything that I explicitly say you are not responsible for. Therefore, if I left something off of this sheet, it can still be on the exam. There will be no multiple-choice questions. Most of the questions will be like the ones in the homework assignments, and possibly a few definition questions, but I am more likely to ask questions that make you use the definitions rather than recite them. I will probably ask one of the questions from the book at the end of the chapters.

The review session will probably be on Wednesday, March 31st.

Chapter 9: What is **economic growth**? What are the negative effects of economic growth? What is the problem of using this as a measure of welfare? What causes GDP per capita to grow? Why do small changes in the growth of GDP matter? Why should you start saving for retirement now? What is **labor productivity** and what changes it? Why is **saving** so important to growth? What is **human capital**? What are the advantages and disadvantages of **patents**? Why do open economies grow faster? How does population growth affect development? Why are property rights important for growth? The **four keys to development** on Page 215 will help you to understand parts of the chapter. *A good webpage with advice on how to save is https://getpocket.com/explore/item/the-best-advice-for-saving-as-much-as-you-can?utm_source=pocket-newtab.*

Chapter 12: Note we will not be making the Assumption #4 on Page 265. We will assume an open economy. What are C, I, G, and X? What determines them? Know what moves the flatter line on the **45° diagram, a.k.a. the Keynesian Cross diagram**. *We only need the $E = Y$ line and $C + I + G + X$ line and to move it. The other lines, like the C and the $C + I$ lines were just to help you understand the main line. Ignore the savings line and the $S = I$ derivation of the model. It is mathematically the same as what we did and the book does, but it is more complicated to understand.* What are the **MPC, MPS, APC, and APS**? *Note that even though our model assumes the MPC is the same for rich and poor, it also concludes that the rich will have a lower APC than the poor. It is easier to notice a person's APC than MPC.* Know what changes C, I, G, and X. Why does consumption depend upon wealth, although not much? Why does investment depend upon interest rates? Ignore the planned versus unplanned investment. What is a lump-sum tax and how does it affect the 45° diagram? What determines net exports? *Note that the AD line is virtually the same as the $C + I + G + X$ line.* Both represent how much is being demanded. However, changes in the price level will move the $C+I+G+X$ line but not AD line. What determines the size of the **government spending multiplier**? What is the economics behind it? How do we see it on the Keynesian Cross diagram? How do our assumptions about prices, interest rates, income taxes, and imports affect its size?

Chapter 10: What is meant by the term **long-run aggregate supply curve**? What determines its shape and its location? How does it relate to the PPF, a.k.a. the PPC? What is **aggregate demand**? Why does it take its shape? Note the logic used for the demand curve's slope does not apply to the slope of the aggregate demand curve. What moves the AD curve? *Anything that changes the demand for goods and/or services ($C+I+G+X$), other than price induced changes in the demand, will move AD. Remember that for all curves, if a variable on one axis changes causing the other variable to change, then you did not move the curve, you retraced it.* What causes inflation? What are **demand pull and cost push inflation**? The book goes into more detail in Chapter 11.

Chapter 11: What are the four assumptions of the **classical school**? What did **Say say**? How does it

relate to the **SRAS curve**? Note that we went into more detail than the book on that explanation. How does it relate to labor supply and labor demand? Why should $S = I$? What assumptions did **Keynes** make? How did that relate to the SRAS curve? Why do we draw the “**Modern**” SRAS? *Unless I specify otherwise, when I refer to the SRAS, use the “Modern SRAS.”* What moves the SRAS? *Notice that the only thing that moves SRAS without moving LRAS is the price of inputs because they do not affect how much could be produced if we are at full employment.* Note the book has useful tables on Pages 229 (Chapter 10) and 253, which is slightly misleading in the next to last line. Marginal **business and/or sales** tax rates move the SRAS because it is a cost of production, while marginal **income** tax rates affect aggregate demand because they reduce income, not raising the cost of production. The prices of inputs only temporarily affect the costs of production without any long-term effects. Since expected future price increases will increase wages, which are an input price, it will move only the AD and SRAS curves but not the LRAS curve. What is meant by **supply shock** and **demand shock**? *Unless specified otherwise, use the “modern” SRAS curve when asked for the SRAS curve. If you are not told that unemployment is high or low, start your graph with LRAS crossing SRAS where it crosses AD.* What are **inflationary and recessionary gaps**? How will they solve themselves if the government takes no actions? What are the demand pull and cost push inflations? How does a change in the value of the dollar on the foreign exchange market affect the SRAS/LRAS/AD diagram? *Note that the book should combine the panels in Figure 11-13. Unless specified otherwise, use the “modern” SRAS curve when asked for the SRAS curve. If you are not told that unemployment is high or low (recessionary gap or inflationary gap respectively), start your graph with LRAS crossing SRAS where it crosses AD.*

Chapter 13: What is fiscal policy? What should the government do with taxes and spending if there is an **inflationary gap** or a **recessionary gap**? Show those actions on the **LRAS/SRAS/AD diagram**. What are the drawbacks of doing fiscal policy, for example, **crowding out investment**, **direct expenditure offset**, and **lags**? Why are these problems? What is the **Laffer Curve** and why does it matter? What is Ricardian Equivalence and why should it hold? Note that **Ricardian Equivalence**, the size of crowding out and lags are often debated among economists. What are automatic stabilizers?

Note that last semester, much of this material was on Exam #3.

Non-graded Homework Assignment #7A to be reviewed with Assignment #7.

- 1) (25 points) What is Ricardian Equivalence? Explain why it holds. The most recent was about \$1,900,000,000,000.00. Do you think Ricardian Equivalence will hold in this situation? Explain your logic.
- 2) (25 points) I feel that crowding out will be a big problem in the future. Explain how it will hurt the economy. What evidence is out there, that it isn't currently a problem? Explain your logic.
- 3) (25 points) What are the three lags in fiscal policy? Use a graph to explain why they may make counter-cyclical fiscal policy counter-productive?
- 4) (25 points) What is meant by direct expenditure offset? Why would it make counter-cyclical fiscal policy unproductive? Explain your logic.