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 be at a time to be determined in class, probably Tuesday 3/20.

Chapter 5: Understand what the 11 assumptions on Page 102 mean and understand how we use them in the Heckscher-Ohlin (H-O) Model. That includes terms like **capital intensive, labor intensive, capital abundant, labor abundant, constant returns to scale (CRTS), perfect competition, perfect internal factor mobility, incomplete specialization,** and **product specific inputs.** What is meant by a **derived demand** and how does it determine the **relative factor prices**? Understand how factor abundance relates to the PPF. Use that to explain the **H-O Theorem**. Be able to prove the Factor-Price Equalization Theorem using the graph with the relative prices of goods on the vertical axis and the relative price of factors on the horizontal axis. Who gets helped and who gets hurt from trade in both the H-O Model and the Specific Factors Model. *Remember that the **real wage** measured in terms of the export does not always change the same way as the real wage measured in terms of the import competing good. Note that because labor (and capital if it is mobile) is mobile and because changes in relative prices of goods is what causes wage changes, the percent change in the price is greater than the percent change in the wage rate. However, in the specific factors model, the rental rate of capital changes a larger percent than the percent change in prices because capital cannot move.* Understand the **Leontief Paradox** and be able to use the following explanations to explain it: **land-intensive export, human capital-intensive exports,** and **factor-intensity reversal.**

Chapter 6: How does **increasing returns to scale (IRTS and external economies)** relate to the PPF? How does that affect trade? What are **monopolies, oligopolies, outsourcing,** and **offshoring**? How do they affect trade? Why does the study of **intra-industry trade** require **differentiated products**? Be able to calculate the **intra-industry trade index (T)**. Explain why the diagram of costs/demand for a **monopolistically competitive** firm looks as drawn. *Note the vertical axis is wrong. It should be $/Q. The same is true for the **graph of the number of firms vs. the price.** The cost line slopes up because it assumes output is constant.* Understand the **Product Cycle Model**. Be able to explain the reason each stage looks as is drawn. How do **transportation costs, logistic costs,** and **tariffs** affect the supply and demand for a good on the trade market. That is the graph where the exporting country is on one side of the axis and the other side of the axis is the other country. Explain how transportation costs can affect where a company sets up in **resource-oriented industries** and **market-oriented industries,** but not **footloose industries**. How can **environmental standards** affect for companies setup?

Chapter 7: In this chapter, we are looking at **comparative statics** rather than **dynamic analysis**. What do those mean? Understand the difference between **balanced growth** and the **growth of one factor**. Be able to explain the **Rybczynski Theorem**. (Do not worry, I won't take off for spelling it wrong.) What is meant by **neutral technical progress, labor-saving technical progress,** and **capital-saving progress.** How do they affect the PPF? What is meant by **protrade, antitrade,** and **neutral growth**? Be able to show them on the PPF/CPF/indifference curve diagram and the offer curve diagram for a **small country**. Why does the offer curve diagram look like that? What happens to welfare of the small country with each of these movements? We will assume that all goods are **normal goods** rather than **inferior goods**. *Remember, normally the labor intensive good is on the horizontal axis for the PPF and the offer curve diagrams.* Understand what is meant by the **terms-of-trade effect** and the **wealth effect** of growing the economy. Understand how **immiserizing growth** can result and be able to show it on PPF/CPF/indifference curve diagram. Be able to show on both the PPF/CPF diagram and the offer curve diagram how a country could have growth which benefits both its terms of trade and its wealth. For Section 7.6, understand how growth in both countries can undo the negative effects of the other country's growth and that tastes can move the offer curve. (I will not ask you to move the indifference curves because that is messy.)

Non-graded Homework Assignment #4A to be reviewed with Assignment #4.

1) (50 points) Draw the PPF/CPF/indifference curve diagram for a capital abundant country called Germany. Also draw the offer curve diagram for Germany and India. Have the two goods be cars and shirts. Assume both are large countries. Illustrate the effects of an increase in whichever factor which could cause immiserizing growth in Germany. State how you know which factor increased. Make sure you show immiserizing growth. Explain how your graph shows immiserizing growth.

2) (10 points) State the Rybczynski Theorem. Explain why it makes economic sense.

3) (15 points) Explain how a large country can gain from slightly restricting trade. Why doesn't that logic apply to a small country?

4) (15 points) Draw an offer curve diagram for a small, capital abundant country, which is consuming both computers and rice. Illustrate the effects of an improvement in the technology in rice harvesting. Explain why the curve(s) moved a drawn. What happens to the terms of trade and the volume of trade?

5) (10 points) Given your answers to the questions above, is the USA more likely to gain from an increase in capital or an increase in labor? Explain your logic. (Note that we are ignoring output per capita.)