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, most likely Thursday, February 20th.

A tiny bit of Chapter 5: What is the difference between **voting** and **spending**?

Chapter 6: How do we calculate **marginal tax rate, average tax rate,** and **total taxes paid**? What is meant by **proportional, progressive,** and **regressive taxes**? What is the **tax base**? How can increasing a tax result in less revenue? What are **sales, excise, ad valorem,** and **specific (unit) taxes**? Who pays the tax? What is the **Laffer Curve**? The book actually draws it in Chapter 13. What are **Medicare** and **Social Security**? What are their effects on the economy? What is the problem with Social Security? What are some of the proposals for solving the problem? What are the pluses and minus of using each "solution"? I am most likely to give you a proposal for a solution and ask you how it would work, and whether or not you would implement my proposal.

Chapter 7: What are, and how do we calculate, the **unemployment rate, labor force participation rate,** and **inflation rate**? What are **stocks** and **flows**? How do they relate to unemployment rates? Know how to classify people by the reason they are unemployed, i.e., laid off, job leaver, etc. Know how to tell who is in which category of unemployment, i.e., **frictional, structural, seasonal,** and **cyclical**. What is the **natural rate of unemployment**, a.k.a., **full employment unemployment rate**? How do **discouraged workers** and **underemployment** complicate the unemployment picture? What are the other costs of unemployment besides lowered production? How do we calculate **CPI, PPI, PCE Index** and **GDP deflator**. I won't ask you to do the calculation, but you may have to describe how it is done. Know how to calculate inflation from those numbers. Why does it matter if inflation is anticipated or unanticipated? What are the **costs of unanticipated and anticipated inflation**? (I added **shoe leather costs** to **menu costs**.) Note that if inflation is expected to be 10% and it ends up being 7%, we had unexpected **deflation** of 3% and that hurts borrowers and any others paying a fixed amount but helps those receiving the money. Know what an **expansion (a.k.a. boom), contraction, recession, depression, trough,** and **peak** are. What is a **leading indicator**?

Chapter 8: What do we mean by **product markets** and **factor markets**? Know what is calculated in **GDP** and what is not. That method is the **expenditure method (C+I+G+X)**. Remember that "X" can be negative and that *you are likely to get the definition of "I" wrong. Stocks and bonds are not investment.* Ignore inventory investment. It is very small and confusing. Why should GDP calculated this way equal the **sum of the incomes and the sum of the value added**? What are some problems with trying to calculate GDP? What are some of the limitations in our understanding the meaning of different levels? How do we calculate GDI, NDP, NI, PI, and DPI? What is the difference between **real** and **nominal GDP**? Ignore the chain-weighted measure for real GDP. How do we compare GDP across countries?

Non-graded Homework Assignment #5A to be reviewed with Assignment #5.

1) (5 points each) For each event, determine how much the American GDP changes and which part of GDP changes. Explain your logic. If you do not use a number, explain why that does not affect GDP.
A) The government sends your grandparents (assuming they American) a Social Security check for $400.
B) A few years ago, Bethany College repaired the roof of Richardson. I do not know how much it cost. Let's assume that it cost $120,000.
C) You buy $10,000 worth of stock in NVIDIA because you think they will excel at AI. You pay $5 in commissions.
D) I just bought a $75 shirt made in Vietnam. I bought it from an American company, Nike. Suppose that Nike paid the Vietnamese $50 for it.

3) (10 points) Developing countries complain the GDP systematically underestimates their production. Explain their logic.

4) (35 points) Suppose in an economy, consumers spend $1000; firms bought $300 worth of new machines and kept $20 of retained earnings; the government spent $400 on salaries and $450 worth of Social Security; we imported $150 worth of goods and exported $100 worth of goods; machines had wear and tear of $30; and companies paid $40 in profit tax while consumers paid $200 in income tax. Calculate GDP, NDP, NI, PI and DPI. Write all equations used and show all work. If you need a number which is not provided, assume it is zero.

5) (15 points) Suppose at the start of a year, the PCE Index is 700 and people expect 10% inflation. At the end of the year, the PCE Index is 735. How much was inflation? Show all calculations. Name two groups of people who are hurt by this inflation. Explain how they are hurt.

6) (10 points) What are the two costs of correctly anticipated high inflation? Briefly explain those costs.