Wilfrid W. Csaplar Jr. Intermediate Macroeconomics Review Sheet for Exam 1

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.

The review session will probably be Sun., 2/17, at a time to be determined, in the normal room (I hope).

You will be given a pair of equations and asked to explain one of them. The equations at the end of the chapters will help you prepare for this part of the exam. Note that most semesters this course had four exams because it was a MWF class. So, some of the topics for this test were on Exam #2 in the past.

Chapter 1: What are **macroeconomics, business cycles, recession, boom, unemployment, inflation, trade surplus,** and **trade deficit**? Why do we **aggregate** and what problems does it cause? How do the **Keynesian** and **Classical** economists differ?

Chapter 2: Know what is in **GDP** and why the three ways of calculating it should give the same result. What is included and what is excluded? What are some reasons why using GDP to measure well-being is not accurate? Understand how **GNP** differs from GDP. Know GDP **+ FNP** = GNP, GNP - **DEP** = **NNP**, NNP - **Indirect Bus. Tax** + **Bus. Subsidy** = **NI**, NI - **Bus. Tax** - **Ret. Earnings** + **TR** = **PI**, PI - **T** = **DPI**. In general, if you know what each of them measures, you can figure out what to include and what to exclude. Also, your book does not include everything used in the calculations. In particular, understand why depreciation, NFP, TR, INT, and T matter to the calculations. Understand what determines **private, government,** and **national savings**. Why should S = I + **CA**? What are s**tocks** and **flows**? Which is savings and which is **wealth**? How do we calculate **real GDP**, the **GDP deflator**, and **inflation**? Why did I say that $\mathbf{r = (i-\pi^e)/(1+\pi^e)}$ rather than the book's equation?

Chapter 3: What do the two **production functions** look like and why? What moves them? Unless I tell you otherwise, draw the production function with N on the horizontal axis. What is a **supply shock**? What determines the **demand for labor**? What moves it? What is the **income-leisure trade off**? What are the **income and substitution effects** and how do they relate to the **supply of labor**? What moves the labor supply curve? What is the **full-employment** level of employment, $\bar{N}$, and why is it not an unemployment rate of 0%? Note that we will refer to full-employment level of unemployment as the **natural rate of unemployment** even though they are technically slightly different. Disregard skilled and unskilled labor. Draw just the combined supply and demand of labor. How is **unemployment rate** measured? Who is classified as unemployed and who is not in the **labor force**? Why might the unemployment numbers be misleading? What are **frictional, structural, cyclical,** and **seasonal unemployment**? What are the two forms of **Okun's Law**? The equation in the book only works on an annual basis if the full-employment level of GDP grows at 3%. From World War II until 1975, it grew at 2.5% and then grew at 2% until 1996, and then went back to 2.5%. (I believe that it probably has gone back down to 2%.) Therefore, the equation is inaccurate, but shows how real GDP can grow and still have unemployment grow, as in 1991 - 1992.

Chapter 4's appendix (pages 149 - 152 and 155 - 164 only): What is the **inter-temporal budget constraint**? Why does a change in r cause a strange movement of it? Why does that mean that r may have an uncertain effect upon current consumption? Ignore the indifference curves. What is the ***Permanent Income Theory*** and the ***Life-Cycle Model***? Their conclusions are virtually the same, but they are different. How do they affect our model of consumption? How do they relate to **Ricardian Equivalence**? What effects do durable goods and borrowing constraints have on the models? You can either put a ^{f} on the future income and consumption or you can put $_{0}$ on the current values and $_{1}$ on the future values. The former is how the book does it, and the latter is how I did it in class.

This is the non-graded Assignment #2A that will be gone over with Assignment #2.

1) (20 points) In December of 2011, Congress and the Obama Administration combined extended the payroll tax cut for two months. Illustrate this on Modigliani's Life-Cycle Model. Explain why the lines moved as drawn. Do you think it stimulated the economy? Why or why not?

2) (15 points) I created an equation to explain the permanent income model. It is $c = b_P y_P + b_T y_T$. The b's are the MPC's. The "P" subscript is for permanent and the "T" subscript means temporary. Explain this equation including giving an estimate for the size of b_P and b_T.

3) (25 points) Draw the Life-Cycle Model's diagram. Show the effects of an unexpected promotion and pay raise. Explain why the curve(s) moved as drawn. What happens to the level of consumption? Why?

4) (20 points) Draw the inter-temporal budget constraint. Draw the effects of an increase in the interest rate. Explain why it moved as drawn.

5) (20 points) What is *Ricardian Equivalence*? Explain why it holds and how it got the name "equivalence."