

ECON 3010 Intermediate Macroeconomic Theory

Homework #1

Due: Thursday, February 13, 2020

#1. Ten *Sapling* multiple-choice questions. You have unlimited attempts to complete the assignment and they are due at midnight on the date above.

The written questions below are due at the beginning of class and should be typed.

#2. Go to the Federal Reserve Economic Database (www.research.stlouisfed.org/fred2/) and print out graphs for the following five macroeconomic time series:

- Nominal GDP (Hint: FRED does not use the terminology ‘nominal’.)
 - Annual real GDP growth rate
 - GDP deflator
 - Annual CPI growth rate
 - Unemployment rate
- a) For each variable, provide enough information about the time series that someone could find the exact data in FRED and replicate the graph (e.g., sample period, seasonal adjustment, frequency, etc.). Use the longest sample period available on FRED.
- b) For each variable, discuss one key feature of how the variable moves over time. There is no right or wrong answer here; just your opinion based on looking at the graph.

#3. Chapter 2. Problems and Applications #7. (Hint: The Laspeyres index is like the CPI with fixed quantities, while the Paasche index is like the GDP deflator with changing quantities.)

#4. Go to FRED and find the most recent data on the labor force, population, and unemployed. Use these figures to calculate *i*) the labor force participation rate and *ii*) the unemployment rate. Do your figures match the rates presented by the U.S. Bureau of Labor Statistics?