MACROECONOMICS
UNIT 4 – Money, Monetary Policy, and Economic Stability

About 15-20% of AP Macro Exam
Understand how monetary policy affects aggregate demand and the condition of the economy. Concepts include the definition of money, fractional reserve banking, and the Federal Reserve System. Students should learn how multiple deposit expansion affect the money supply and how the money supply affects the economy. Be sure to understand the goals and tools of monetary policy and compare the Keynesian view monetary policy with the monetarist view.

<u>Key ideas in UNIT FOUR</u>

- To accomplish its functions, money should have certain characteristics which include portability, uniformity, acceptability, durability, divisibility, and stability in value.
- Throughout history, there have been four basic types of money: commodity money, representative money, fiat money, and checkbook money.
- Money has three main functions – as a medium of exchange, a standard of value, and a store of value.
- Economists often disagree about what money is. M1 is the narrowest definition and consists of checkable deposits, traveler's checks, and currency. Checkable deposits are called demand deposits and account for about 75 percent of M1.
- M2 and M3 are broader definitions of money and include savings accounts and other time deposits.
- MV – PQ is the equation of exchange; money times velocity equals price times quantity of goods. PQ is the nominal GDP.
- Velocity is the number of times per year the money supply is used to make payments for final goods and services:
  $$V = \frac{GDP}{M}$$
- Money is created when banks make loans. One bank's loan becomes another bank's demand deposit. Demand deposits are money. When a loan is repaid, money is destroyed.
- Banks are required to keep a percentage of their deposits as reserves. Reserves can be currency in the bank vault or deposits at the Federal Reserve Banks. This reserve requirement limits the amount of money banks can create.
- The money multiplier is equal to one dived by the reserve requirement.
  $$\text{Money multiplier} = 1 / rr$$
  The higher the reserve requirement, the less money can be created; the lower the reserve requirement, the more money can be created.
- The Federal Reserve, or "Fed," regulates financial institutions and controls the nation's money supply. The three main tools that it uses to control the money supply are: changing the discount rate, changing the reserve requirement, and buying and selling government bonds on the open market (open market operations).
- If the Fed wants to encourage bank lending and increase the money supply, it will decrease the discount rate, decrease the reserve requirement, and buy bonds on the open market. The Fed expands the money supply to fight unemployment. This is called an expansionary monetary policy or an "easy money" policy.
- If the Fed wants to hold down or decrease the money supply, it will discourage bank lending by increasing the discount rate, increasing the reserve requirement, and selling bonds on the open market. The Fed discourages bank lending during inflation. This is called a contractionary monetary policy or a "tight money" policy.
- The reserve requirement is the most powerful tool of monetary policy; it is rarely used because of its power. Open market operations are the most frequently used tool because they permit the Fed to make small changes in the money supply.
- Monetarists believe that money directly affects the economy through the equation of exchange. Monetarists believe the money supply should be increased at the rate of three to five percent a year, exactly the same amount as the increase in real GDP.

- Keynesians believe that money affects interest rates and that interest rates, in turn, affect investment and GDP. Tight money increases interest rates, which decreases aggregate demand, which helps fight inflation. Easy money decreases interest rates and increases GDP during recessions.
- The Fed cannot target both the money supply and interest rates simultaneously so it must choose which goal to attempt to achieve.