I. CIRCULAR FLOW

A. two markets
   1. product
   2. factor

B. two actors
   1. households
   2. firms

C. two flows
   1. real
   2. money
      a. value of real
      b. common denominator

D. Withdrawals
   1. Savings
   2. Taxes
   3. Imports

E. Injections
   1. Investment
      a. purchase of new capital (K)
      b. economic vs. financial
   2. Government spending
   3. Exports

F. Aggregate Expenditures
   1. all $ flows entering firm
   2. \( AE = C + I + G + X \)
   3. spending equals revenue
II. NATIONAL INCOME ACCOUNTS

A. Introduction
   1. Measure the size of the Circular Flow
   2. GDP

B. “Expenditures Approach”
   1. conceptually: \( GDP = C + I + G + X \)
   2. in terms of statistics published by the government
      a. C, I and G include imported components
      b. so \( GDP_{na} = C + I + G + (X - M) \)

C. “Income Approach”
   1. What happens to income as it goes around the Circular Flow, from the Firms to the Households?
   2. GDP, NDP, NI, PI, DI

D. Observations
   1. depreciation is usually between 8% and 13% of GDP
   2. DI is usually 65% to 70% of GDP

E. re computation
   1. avoid double-counting
      a. final sales, or
      b. value-added
   2. avoid non-productive transactions
      a. used
      b. financial
   3. only market transactions
      a. not “underground”
      b. not illegal

F. comments
   1. GDP \( \neq \) quality of life
   2. real [constant$] vs. money [nominal, or current prices]
   3. total vs. per capita
III. GROWTH AND FLUCTUATIONS

   A. Business cycle
   B. phases

IV. INFLATION

   A. Definitions
      1. Inflation
      2. Relative Prices
      3. Price index
   B. Price Indices
      1. issues
         a. choice of “market basket”
         b. choice of base year
         c. data collection
      2. CPI
      3. PPI, WPI
      4. GDP deflator
   C. Classification
      1. Demand-Pull
         a. meaning
         b. micro foundation
         c. AD-AS illustration
      2. Cost-Push
         a. meaning
         b. micro foundation
         c. AD-AS illustration
   D. Consequences
      1. redistributive
         a. micro
         b. relative prices
      2. discourage savings [and capital-formation?]
      3. encourage speculation?
      4. Bracket creep?
      5. wage-price spiral?
V. UNEMPLOYMENT

A. Definitions
   1. labor force
   2. unemployment
   3. unemployment rate

B. Issues
   1. discouraged workers
   2. underemployment
   3. moonlighting
   4. non-market activity

C. Numbers

D. Micro basis
   1. excess supply at going wage
   2. why continue? what prevents adjustment?

E. Reasons for concern
   1. individual
      a. income
      b. psychology
   2. technical
      a. correlated with business cycle
      b. Δincome → Δconsumption
   3. national
      a. loss of potential output
      b. fairness, justice, social stability

F. Classifications
   1. frictional
   2. structural
   3. cyclical
   4. seasonal?

G. Incidence
   1. age
   2. race
   3. gender
   4. skill/experience
   5. education