Note: The outline is intended to provide the student with a list of the major topics that will be on the final exam. The instructor is not limited to questions that fit into one of these precise categories, though the majority of questions will relate to the topics listed below.

I. Ch. 2: The economic problem
   a. Comparative versus absolute advantage
   b. construct a PPF for an economy
   c. technological efficiency and PPF
   d. source of shifts in PPF

II. Ch. 3: Supply and Demand
   a. Law of supply and demand
   b. Market equilibrium
   c. Shortages and surpluses
   d. Causes and results of changes in supply
   e. Causes and results of changes in demand
   f. effects of price ceilings
   g. effects of price floors

III. Ch. 4: Elasticity
   a. price elasticity of demand
      i. formulae for calculating
      ii. elastic, inelastic, unit elastic and implications for changes in total revenue when price changes
      iii. determinants of demand elasticity
         1. substitutes
         2. share of income spent on good
         3. time period to adjust
      iv. price elasticity and linear demand curve
   b. income elasticity of demand
      i. normal good, luxury good, inferior good
   c. cross price elasticity of demand
      i. complements versus substitutes
   d. price elasticity of supply
      i. storage costs
      ii. time period to adjust
      iii. elasticity of supply for inputs

IV. Ch. 5: Efficiency and Equity
   a. Allocative efficiency in markets
      i. definition
ii. link to supply/demand model

iii. consumer surplus
   1. definition
   2. graphic representation

iv. producer surplus
   1. definition
   2. graphic representation

v. deadweight loss
   1. definition
   2. graphic representation

vi. positive and negative externalities and market failure
   1. definitions
   2. market outcome versus efficient outcome
   3. deadweight loss
   4. corrective measures

V. Ch. 6: Government Actions in Markets.
   a. Discuss effects of each of the following on consumers, producers, efficiency of markets and deadweight loss
      i. price ceiling
      ii. price floor
      iii. taxes
         1. how elasticity affects consumer and producer share of tax
         2. how elasticity affects size of deadweight loss
   iv. subsidies
   v. quotas

VI. Ch. 7: International Trade
   a. Winners and losers from international trade
      i. exported goods
      ii. imported goods
   b. Tariffs
      i. effect on consumers, producers
      ii. tax revenue generated
      iii. deadweight loss
   c. Quotas
      i. effect on consumers, producers
      ii. deadweight loss
      iii. profits to importers
   d. Other trade barriers
VII. Ch. 10: Organizing production.
   a. accounting versus economic profits
   b. implicit rental rate
   c. accounting versus economic depreciation
   d. types of business organization and their advantages/disadvantages
      i. proprietorship
      ii. partnership
      iii. corporation
   e. Measuring concentration of markets
      i. 4-firm concentration ratio
      ii. Herfindahl-Hirschman index
      iii. difficulties in measuring concentration
         1. geographic & product boundaries
         2. barriers to entry
         3. ability to collude
   f. economies of scale
   g. economies of scope

VIII. Ch. 11: Output and costs
   a. definitions of MP, AP
   b. Law of diminishing marginal returns
   c. definitions of MC, AVC, AFC, ATC
   d. distinction between fixed and variable input
   e. distinction between fixed and variable cost
   f. relationship between MC and AVC, ATC
   g. relationship between MC and MP; AVC and AP
   h. Short run versus long run cost
      i. economies of scale
      j. minimum efficient scale

IX. Ch. 12: Perfect competition.
   a. market characteristics
   b. firm versus industry demand curve
   c. How to maximize profits in SR
   d. Short run supply curve
   e. Short run shut down decision
   f. Long run equilibrium driven by exit/entry
   g. External economies/diseconomies (incr/decr cost industries)
h. Short run and long run effects of the following on price, output (industry and firm), profits, number of firms.
   i. change in demand
   ii. change in cost
   iii. change in technology
   iv. tax

i. Effects of barriers to entry (e.g. medallions)

X. Ch. 13: Monopoly
   a. causes and types of monopoly
   b. single price monopoly
      i. profit maximizing price and output
      ii. deadweight loss
      iii. comparison to perfect competition
   c. price discriminating monopoly
      i. perfect price discrimination
         1. profit maximizing
         2. deadweight loss
         3. comparison to perfect competition
      ii. price discrimination by group
         1. role of elasticity
         2. elasticity and MR
   d. rent seeking behavior and monopoly
   e. regulation of natural monopoly
      i. AC pricing (price, quantity, profits, deadweight loss)
      ii. MC pricing (price, quantity, profits, deadweight loss)

XI. Ch. 14: Monopolistic Competition
   a. market characteristics
   b. profit maximizing price and output
   c. deadweight loss
   d. long run equilibrium
      i. excess capacity
      ii. zero economic profits
   e. importance of advertising and product innovation

XII. Ch. 15: Oligopoly
   a. market characteristics
   b. prisoner’s dilemma and game theory
      i. cooperative solution
      ii. Nash equilibrium
iii. importance of repeating game
iv. effect of ability to monitor on collusion

c. cartels as a prisoner’s dilemma
   i. how cartel/collusion affect price/quantity in competitive market
   ii. incentive to cheat

d. Anti-trust policy
   i. Sherman Act
   ii. Clayton Act
   iii. FTC Act
   iv. Robinson-Patman
   v. Miller-Tydings

e. Dept of Justice merger guidelines and HHI.