ADVANCED PLACEMENT MICROECONOMICS

Maple Grove Senior High School
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Required textbook

Economics, McConnell and Brue, 17th edition, 2008.

Course description

Microeconomics is the study of how people decide to allocate scarce resources among alternative courses of action in order to satisfy needs and wants. This course will examine demand and supply principles, cost and revenue curves, market structures, factor markets, government intervention in the market mechanism, positive and negative externalities, and income distribution. Emphasis will be placed on core critical thinking skills so the reasoned, logical arguments form the basis of economic decision-making.

Course grading

Student work will be assessed in accordance with school, district, and classroom policies and expectations. Grades earned by students will be based on an evaluation of summative work (80%) and formative work (20%).

Weekly quizzes and assigned readings

It is expected that all assigned readings be completed by the <u>beginning of the week</u> for which they are assigned. Quizzes on assigned readings and classroom instruction are administered for formative purposes: students and the teacher should use these assessments as a means to determine the current level of understanding and areas where improvement is needed. As such, these quizzes will not always be announced.

Unit exams

Unit exams are designed to fulfill two general purposes. First, they serve as summative assessments of the information covered over multiple chapters. Second, they are meant to prepare students for taking the AP exam.

Course mechanics

- *Attendance*: Attendance will be taken at the beginning of each class period. Please respect your classmates, your teacher, and your own learning by showing up on time.
- *Classroom Behavior*: All students are expected to behave with respect toward each other, their teacher, and the classroom. It is expected that students will bring all relevant course materials to class each day (*pen/pencil, notebook/folder, & basic function calculator*).
- *Make-Up Procedures*:   It is the responsibility of absent students to check with a classmate or the teacher upon their return to school to receive any missed assignments or notes.
- *Grades*: Students will earn a grade based upon what they have learned, not simply what work has been attempted or completed. Final grades will include an evaluation of all assignments, quizzes, exams, and student learning. The following grading scale will be used:

A: 3.51	A-: 3.0	B+: 2.84	B: 2.67
B-: 2.5	C+ : 2.34	C: 2.17	C- : 2.0
D+: 1.84	D: 1.67	D-: 1.5	

Formative Task Examples (20%)
-Homework
-In-class assignments
-Reading quizzes
-APLIA practice

Summative Task Examples (80%)
-Exam 1
-Exam 2
-Exam 3
-Comprehensive final

- *Formative Tasks:*
  - Students who are absent the day a formative assessment is <u>assigned</u> are expected to complete the task within five school days of their return.
  - Students who are absent the day a formative assessment is <u>due</u> are expected to turn in the task immediately upon their return.
  - *Credit for formative work will only be granted if the work is completed <u>prior</u> to the initial summative assessment.*

- *Summative Tasks:*
  - Students who are <u>absent</u> the day of a summative assessment are expected to complete the assessment within five school days of their return. Please make these arrangements with the instructor.
  - <u>Reassessment assumptions</u>:
    - All original formative work is completed and meets the standards.
    - Additional assigned formative work is completed to standard.
      - The format of the "additional formative work" is at the discretion of the instructor.
    - The reassessment of the summative task will take place *prior* to the next summative assessment or within a reasonable timeframe established by the instructor.
    - The *format* of the reassessment is at the discretion of the instructor.

Students can boost their Maple Grove grade by scoring well on the AP exam as follows:

Score on AP exam	Course grade (will be changed if students earned less than this during the trimester)	Standards-based grading assessment score	District 279 Secondary Rubric Descriptors
5	A	4	Displays excellent quality and performs with high accuracy
4	A-	3	Displays high quality and performs with accuracy
3	B	2.67	Displays/performs with a mix of the criteria described above/below
0-2	No Impact	≤2	Displays basic, limited, or a lack of quality; performs with inconsistent, limited or lack of understanding

Course outline

Unit 1: Fundamental economic concepts
- Scarcity, choice and opportunity cost
- Production possibilities curve
- Absolute and comparative advantage, specialization and trade
- Economic systems
- Property rights and the role of incentives
- Marginal analysis
- Circular flow

(Mathematical/graphical skills)
- Graph a production possibilities model
- Explain the shapes of the production possibilities curves
- Explain how the production possibilities model illustrates scarcity, choice and opportunity cost
- Interpret selected points on the production possibilities model
- Explain and show economic growth on the production possibilities model
- Explain and show the impacts of trade on a production possibilities model
- Calculate opportunity cost
- Calculate terms of trade and gains from trade

Unit 2: The nature and functions of product markets
- Demand and supply
  - Determinants of demand and supply
  - Shifts and movements of the demand and supply curves
  - Price ceilings and floors
  - Elasticity
    - Price, income and cross-price elasticity of demand
    - Price elasticity of supply
  - Consumer surplus, producer surplus and market efficiency
  - Tax incidence and deadweight loss
- Theory of consumer choice
  - Total utility and marginal utility
  - Utility maximization; equalizing marginal utility per dollar
  - Individual and market demand curves
  - Income and substitution effects

(Mathematical/graphical skills)
- Graph demand and supply showing equilibrium price and quantity
- Given market scenarios, identify shifts and movements in demand and supply and determine new equilibrium price and quantity
- Graph effects of a price ceiling and a price floor
- Calculate shortages and surpluses given market data
- Calculate and interpret price, income and cross elasticity
- Graph and differentiate an inelastic from an elastic demand curve, and determine impacts on total revenue
- Graph and illustrate the tax incidence given an elastic and inelastic demand curve
- Explain optimal purchase rule
- Explain why the MU/P varies along the demand curve
- Explain and illustrate consumer and producer surplus
- Calculate MU data from total utility data

Unit 2 continued: The nature and functions of product markets

- Production and costs
    - Production functions: SR and LR
    - Marginal product and diminishing marginal returns
    - Short-run costs
    - Long-run costs and economies of scale
    - Cost-minimizing input combinations
- Firm behavior and market structure
    - Profit
        - Accounting vs. economic profit
        - Normal profit
        - Profit maximization: MR = MC rule

(Mathematical/graphical skills)

- Graph total, marginal and average output
- Show point of diminishing returns on graph of the production function
- Graph total variable and total fixed cost
- Graph average total cost, average variable cost, average fixed cost and marginal cost
- Identify points of diminishing returns on cost graphs
- Graph and explain short-run and long-run average cost curves
- Given changes in variable and fixed cost, illustrate changes on a short-run cost curve
- Show how a short-run supply curve is derived from marginal cost curves
- Calculate MP, TC, TFC, TVC, AFC, AVC, ATC and MC
- Interpret relationships between and among cost curves

    - Perfect competition
        - Profit maximization
        - Short-run supply and shutdown decision
        - Firm and market behaviors in SR and LR equilibrium
        - Efficiency and perfect competition

(Mathematical/graphical skills)

- Graphically differentiate between the demand in a competitive industry (market) from a competitive firm
- Graphically illustrate an individual firm's short-run profit maximization price and output, short-run minimization of losses, and shutdown
- Graph a perfectly competitive firm in long-run equilibrium
- Illustrate how a short-run supply curve is derived from individual firms
- Illustrate a long-run adjustment given an increase/decrease in demand for a product
- Use side-by-side graphs of a firm vs. industry in a competitive market
- Show how changes in demand and supply affect a competitive firm in the short run and long run

Unit 2 continued: The nature and functions of product markets
- o Monopoly
  - Sources of market power
  - Profit maximization
  - Inefficiency of monopoly
  - Price discrimination
  - Natural monopoly

(Mathematical/graphical skills)
- Graph and illustrate a profit-maximizing output and price for a monopolist
- Graph and illustrate a short-run loss for a monopolist
- Show how demand, total revenue and marginal revenue are related for a typical monopolist
- Graph a natural monopoly and show the effects of government regulation (average cost pricing and marginal cost pricing)
- Graph how a monopolist can discriminate in the final sale of its product

- o Oligopoly
  - Interdependence, collusion and cartels
  - Game theory and strategic behavior
- o Monopolistic competition
  - Product differentiation and the role of advertising
  - Profit maximization
  - Short-run and long-run equilibrium
  - Excess capacity and inefficiency

(Mathematical/graphical skills)
- Graph and explain monopolistic competition
- Graph and explain the price and output in the case of oligopoly
- Graph and explain the regulation of a monopolist
- Create game theory matrixes to explain the Nash equilibrium
- Use side-by-side graphs to illustrate comparisons and contrast of monopolistic competition with pure monopoly and/or pure competition

Unit 3: Factor markets
- Derived factor demand
- Marginal revenue product
- Labor market and firms' hiring of labor
- Market distribution of income

(Mathematical/graphical skills)
- Graph and explain the demand and supply of a resource
- Graph how equilibrium wage rates are determined in a competitive and in an imperfect market (monopsony)
- Graph the effects of minimum wage rates above equilibrium price
- Graph rent and interest rates and explain how equilibrium rates are achieved

Unit 4: Market failure and the role of government
- Externalities
    - Marginal social benefit and marginal social cost
    - Positive externalities
    - Negative externalities
    - Remedies
- Public goods
    - Public vs. private goods
    - Provision of public goods
- Public policy to promote competition
    - Antitrust policy
    - Regulation
- Income distribution
    - Equity
    - Sources of income inequality

(Mathematical/graphical skills)
- Graph a negative and positive spillover effect
- Illustrate a graphical analysis of pollution or other externalities (private vs. social cost)
- Read and interpret Lorenz curves
- Read and interpret Gina coefficients

Course schedule

9/2 Introductions. Course overview.

9/3 Scarcity. Choice. Opportunity cost. Marginal thinking. Read 4-11.

9/4 Measurement concepts. Production possibilities. Read 11-18 and 21-25.

9/5 Absolute and comparative advantage. Read 89-99 and 676-691.

9/8 Specialization and trade.

9/9 Economic systems. Property rights. Circular flow. Read 29-41 and 75-76.

9/11 Exam 1

9/12 Demand and supply. Read 45-57.

9/15 Demand and supply shifts and movements.

9/16 Price ceilings. Price floors. Read 57-61.

9/18 Elasticity (demand, supply, cross, income). Read 340-351.

9/19 Consumer and producer surplus. Read 352-354.

9/22 Tax incidence. Deadweight loss. Read 354-356 and 573-577.

9/23 Total and marginal utility. Income and substitution effects. Read 360-369.

9/25 Utility maximization $MU/P_1 = MU/P_2$.

9/26 SR and LR production functions. Normal profit. Accounting profit and economic profit. Read 379-380.

9/29 Marginal product and diminishing returns. Read 381-389.

9/30 Short-run costs.

10/2 Long-run costs and economies of scale. Read 389-396.

10/3 Cost-minimizing input combinations.

10/7 Profit maximization rule: $MC = MR$.

10/9 Perfect competition. Read 400-420.

10/10 Perfect competition.

10/13 Perfect competition.

10/14 Monopoly. Read 424-441.

10/15 Monopoly.

10/20 Comparison of perfect competition and monopoly.

10/21 Monopolistic competition. Read 445-450.

10/23 Monopolistic competition.

10/24 Oligopoly. Read 451-464.

10/27 Game theory.

10/28 Min-Max, Dominance, Nash, etc.

10/30 Review for Exam 2

10/31 Exam 2

11/3 Discuss Exam 2.

11/4 Resource and factor markets. Circular flow revisited. Derived factor demand. Read 489-501.

11/6 Marginal revenue product. Labor market. Read 506-510.

11/7 Monopsony. Read 510-523.

11/10 Market distribution of income.

11/11 Exam 3.

11/13 Market failure and the role of government. Public vs. private goods. Read 544-560.

11/14 Externalities. Marginal social benefit and marginal social cost.

11/17 Regulation and antitrust. Read 583-591.

11/18 Income distribution. Lorenz curves and Gini coefficients. Read 616-629.

11/20 Review for comprehensive final exam

11/21 Final exam part 1

11/24 Final exam part2