Mathematics of Personal Finance focuses on real-world financial literacy, personal finance, and business subjects. Students apply what they learned in Algebra I and Geometry to topics including personal income, taxes, checking and savings accounts, credit, loans and payments, car leasing and purchasing, home mortgages, stocks, insurance, and retirement planning.

Students then extend their investigations using more advanced mathematics, such as systems of equations (when studying cost and profit issues) and exponential functions (when calculating interest problems). To assist students for whom language presents a barrier to learning or who are not reading at grade level, Mathematics of Personal Finance includes audio resources in both Spanish and English.

This course is built to state standards as they apply to Mathematics of Personal Finance and adheres to the National Council of Teachers of Mathematics’ (NCTM) Problem Solving, Communication, Reasoning, and Mathematical Connections Process standards.

Length: Two semesters

UNIT 1: WHAT IS MONEY?
- Lesson 1: Money Defined
- Lesson 2: How Money Is Created
- Lesson 3: Inflation and Recession
- Lesson 4: The National and Global Debt
- Lesson 5: Other Forms of Currency

UNIT 2: COST OF LIVING AND BUDGET
- Lesson 1: Types of Wages
- Lesson 2: Compensation Packages
- Lesson 3: Piece Rate
- Lesson 4: Linear Equations and Wages
- Lesson 5: Percentages and Commission
- Lesson 6: Take-Home Pay: Required Deductions
- Lesson 7: Take-Home Pay: Optional Deductions
- Lesson 8: Income and Career
- Lesson 9: Cost of Living and Budget
- Lesson 10: Income and Budgeting Wrap-Up

UNIT 3: INCOME TAX
- Lesson 1: Taxable Income
- Lesson 2: Itemized Deductions
- Lesson 3: Tax Brackets
- Lesson 4: Submitting Your Tax Form
- Lesson 5: Income Tax Wrap-Up

UNIT 4: CHECKING AND SAVINGS
- Lesson 1: Simple Interest
- Lesson 2: Exponential Growth
- Lesson 3: Compound Interest
- Lesson 4: The Rule of 72
Lesson 5: Checking Accounts
Lesson 6: Balancing Your Checkbook
Lesson 7: Comparing Checking Accounts
Lesson 8: Savings Accounts
Lesson 9: Comparing Savings Accounts
Lesson 10: Checking and Savings Wrap-Up

UNIT 5: PURCHASING AND CREDIT
Lesson 1: Sales Tax
Lesson 2: Coupons, Rebates, and Sales
Lesson 3: Marketing
Lesson 4: Credit Cards
Lesson 5: Calculating Credit Card Interest
Lesson 6: Tracking Payments and Purchases
Lesson 7: Comparing Credit Cards
Lesson 8: Credit Scores
Lesson 9: Bankruptcy
Lesson 10: Purchasing and Credit Wrap-Up

UNIT 6: LOANS AND PAYMENTS
Lesson 1: Single and Payday Loans
Lesson 2: Installment Loans and Layaway
Lesson 3: Monthly Payment
Lesson 4: Loan Pre-Approvals
Lesson 5: Deferred Payments
Lesson 6: Paying Off
Lesson 7: Prepayment
Lesson 8: Loans and Payments Wrap-Up

UNIT 7: SEMESTER 1 REVIEW AND EXAM
Lesson 1: Semester 1 Review and Exam

UNIT 8: CAR OWNERSHIP
Lesson 1: Car Leasing
Lesson 2: Car Renting and Sharing
Lesson 3: Car Dealers
Lesson 4: Payments
Lesson 5: Dealer Incentives
Lesson 6: Owning and Operating
Lesson 7: Equity and Depreciation
Lesson 8: Planning a Trip
Lesson 9: Total Trip Expenses
Lesson 10: Car Ownership Wrap-Up

UNIT 9: HOME OWNERSHIP
Lesson 1: Selecting a House: Fairly Priced?
Lesson 2: Mortgages: Fixed Rate
Lesson 3: Mortgages: Variable Rate
Lesson 4: Multiple Mortgages and Refinancing
Lesson 5: Discounts
Lesson 6: Balloon Mortgages
Lesson 7: Additional Costs: Fees
UNIT 10: INSURANCE AND RETIREMENT

- Lesson 1: Car Insurance Premiums
- Lesson 2: Suggested Premium
- Lesson 3: Property and Renters Insurance
- Lesson 4: Life Insurance
- Lesson 5: Calculating Life Insurance Premiums
- Lesson 6: Retirement Accounts
- Lesson 7: Insurance and Retirement Wrap-Up

UNIT 11: INVESTMENTS

- Lesson 1: CDs
- Lesson 2: Annuities
- Lesson 3: Bonds
- Lesson 4: Stocks
- Lesson 5: The Stock Market
- Lesson 6: Prediction
- Lesson 7: Periodic Investment
- Lesson 8: Retirement and Periodic Investment
- Lesson 9: Individual Net Worth
- Lesson 10: Investments Wrap-Up

UNIT 12: BUSINESS

- Lesson 1: Cost and Revenue Functions
- Lesson 2: Profit
- Lesson 3: Solving Systems of Equations
- Lesson 4: Matrices
- Lesson 5: Factors Affecting Business
- Lesson 6: Maximizing Revenue or Minimizing Cost
- Lesson 7: Running a Business
- Lesson 8: Storage, Inventory, and Other Business Concerns
- Lesson 9: Business Wrap-Up

UNIT 13: SEMESTER 2 REVIEW AND EXAM

- Lesson 1: Semester 2 Review and Exam