

Financial Mathematics YAG

One Credit | 36 Weeks (4 Grading Periods) | Recommended Grades 10–12 | Prerequisite: Algebra I

TEKS Abbreviation: FM = §127.251 Financial Mathematics. Mathematical process standards FM1(A–G) are integrated throughout every unit. CTE Employability Skills §127.15(d)(1) are also integrated throughout. Financial Mathematics satisfies a high school mathematics graduation requirement. ACCESS may support career exploration, postsecondary planning, scholarship/financial-aid research, employability, and personal financial planning.

GP	Wks	Unit & Focus	Major Learning Tasks & Assessments	Integrated TEKS	Extension Activities
1	1–5	Unit 1 – Compensation, Benefits & Federal Taxes	• Compare sources of income, employee benefits, employee vs. independent-contractor compensation, and economic effects on earnings • Calculate gross, net and taxable income; payroll deductions; FICA/Medicare; overtime, tips and other earnings • Analyze pre-tax versus after-tax spending and total compensation • Calculate federal income, capital-gains and self-employment taxes using current rates • Analyze deductions, charitable contributions, filing status, marginal/effective rates, education tax relationships and tax-preparation options	• FM1(A–G), FM2(A–L), FM3(A–M) • CTE ES §127.15(d)(1)	• Paycheck/compensation analysis • Tax-return simulation • ACCESS: career-income comparison
1	6–9	Unit 2 – Financial Institutions, Accounts & Time Value of Money	• Compare cash, checks, credit/debit cards and electronic funds transfers • Evaluate savings, checking, certificates of deposit and money-market accounts • Calculate simple/compound growth and time value of money using tables, graphs and algebraic/technology methods • Apply the Rule of 72 and analyze exponential representations • Reconcile a bank statement, compare community financial services and identify appropriate funding sources for purchases	• FM1(A–G), FM4(A–G) • CTE ES §127.15(d)(1)	• Bank-account comparison • Compound-interest investigation • Financial-services research
2	10–12	Unit 3 – Budgeting, Standards of Living & Postsecondary Planning	• Create a balanced personal budget with fixed/variable expenses, emergency savings, college savings and retirement savings • Compare poverty, minimum wage, living wage and desired standards of living • Research educational, military and employment opportunities aligned to interests and skills • Calculate postsecondary costs and identify savings, employment, financial aid, grants, work-study, loans, scholarships and internships • Graph career compensation versus education costs and calculate return on investment for a selected postsecondary pathway	• FM1(A–G), FM14(A–C), FM16(A–G) • CTE ES §127.15(d)(1)	• ACCESS: college/ career planning • Personal budget project • Education ROI analysis
2	13–17	Unit 4 – Credit, Borrowing, Credit Reports & Identity Theft	• Evaluate credit-card advantages/disadvantages and calculate fees and borrowing costs • Compare bank, credit-union, student, payday and auto-title loans using graphs/data and analyze risk • Evaluate loan processes and analyze loan balances with equal monthly payments • Analyze credit scores, negative credit reports and personal credit-report information • Define identity-theft types and create prevention/reporting plans • Apply credit and identity-protection decisions to a comprehensive consumer scenario	• FM1(A–G), FM5(A–I), FM15(A–C) • CTE ES §127.15(d)(1)	• Loan comparison lab • Credit-report analysis • Identity-theft prevention plan
2	18	Semester 1 Exam – Financial Mathematics	• Cumulative written/performance assessment • Personal-finance mathematical application task • Budget, tax, banking and credit decision-making synthesis	• Cumulative: FM1–5, FM14–16 • CTE ES §127.15(d)(1)	• Targeted remediation/enrichment

3	19–23	Unit 5 – Housing: Renting, Mortgages & Homeownership	- Analyze mortgage payments and effects of additional principal using exponential representations - Create amortization tables varying down payment, term, principal payment and interest rate - Compare down-payment strategies and calculate ownership costs, taxes, insurance, closing costs, maintenance, utilities and fees - Analyze mortgage tax deductions, emergency savings and risks associated with falling home prices - Compare renting versus owning, use property listings to compare housing, analyze leases and compare renter's insurance	- FM1(A–G), FM6(A–L) - CTE ES §127.15(d)(1)	- Mortgage/amortization lab - Rent-vs-buy project - Housing market comparison
3	24–27	Unit 6 – Vehicles: Purchasing, Leasing & Total Cost of Ownership	- Create vehicle-loan amortization tables using technology - Calculate insurance, maintenance, repair and fuel costs - Compare buying/owning versus leasing and compare several vehicle options - Evaluate warranties and maintenance contracts - Calculate emergency savings needed to maintain vehicle payments - Research driver-education options and analyze how moving violations affect insurance rates	- FM1(A–G), FM7(A–G) - CTE ES §127.15(d)(1)	- Vehicle cost-of-ownership project - Loan amortization lab - Insurance-rate scenario
4	28–30	Unit 7 – Insurance & Risk Management	- Compare term and permanent life-insurance costs and benefits - Estimate life-insurance needs using needs and earnings-multiple approaches - Calculate healthcare premiums, copayments, deductibles and out-of-pocket costs - Investigate disability-income insurance and special protection coverages - Explain actuarial premium-setting and evaluate insurer/agent selection and professional designations	- FM1(A–G), FM9(A–G) - CTE ES §127.15(d)(1)	- Insurance needs analysis - Healthcare-cost scenario - Risk-management comparison
4	31–33	Unit 8 – Investments, Retirement & Annuities	- Evaluate stock/mutual-fund measures including dividend yield, P/E ratio, ROI, EPS and NAV - Calculate bond transaction costs, yield and interest return - Compare stocks, bonds, mutual funds, ETFs and real estate; analyze diversified versus non-diversified portfolios - Compare IRAs, Roth IRAs, 401(k)s and 403(b)s and graph the benefits of early continuous investing - Calculate early-withdrawal tax penalties, annual retirement savings needs and future value of an annuity	- FM1(A–G), FM8(A–D), FM10(A–D), FM11 - CTE ES §127.15(d)(1)	- Student investment portfolio - Retirement-growth modeling - Annuity calculation lab
4	34–35	Unit 9 – Estate Planning, Charitable Giving & Financial Life Plan	- Explain how wills and trusts support distribution of assets after death - Analyze the value and benefits of charitable giving - Integrate earnings, taxes, banking, credit, housing, transportation, insurance, investments and retirement into a financial life plan - Revisit postsecondary ROI, career compensation and long-term financial goals - Present and justify financial decisions using precise mathematical language, tables, graphs and technology	- FM1(A–G), FM12, FM13, FM14(A–C), FM16(A–G) - CTE ES §127.15(d)(1)	- ACCESS: financial/career plan - Estate-planning scenario - Financial life-plan presentation
4	36	Semester 2 Exam & Financial Life Plan Showcase	- Cumulative written/performance assessment - Comprehensive personal-finance mathematical application - Final financial life-plan presentation and reflection	- Cumulative: FM1–16 - CTE ES §127.15(d)(1)	Stakeholder showcase

Financial Mathematics TEKS Coverage Checklist

Coverage verification: All 16 Financial Mathematics strands and every student expectation are intentionally addressed. Mathematical process standards FM1(A–G) and CTE Employability Skills §127.15(d)(1) are integrated throughout the course.

Strand	Student Expectations	YAG Placement	Coverage
FM1	A–G	All units	100%
FM2	A–L	Unit 1; reinforced Units 3, 9	100%
FM3	A–M	Unit 1	100%
FM4	A–G	Unit 2	100%
FM5	A–I	Unit 4	100%
FM6	A–L	Unit 5	100%
FM7	A–G	Unit 6	100%
FM8	A–D	Unit 8	100%
FM9	A–G	Unit 7	100%
FM10	A–D	Unit 8	100%
FM11	Single expectation	Unit 8	100%
FM12	Single expectation	Unit 9	100%
FM13	Single expectation	Unit 9	100%
FM14	A–C	Units 3, 9	100%
FM15	A–C	Unit 4	100%
FM16	A–G	Units 3, 9	100%

Implementation Notes

- Financial Mathematics is a one-credit course recommended for Grades 10–12, requires Algebra I, and satisfies a high school mathematics graduation requirement.
- Current rates and authentic financial data should be used when teaching taxes, banking, credit, housing, vehicles, insurance, investments, retirement, and postsecondary financial planning.
- Mathematical process standards FM1(A–G) should be evident in every unit through problem solving, technology, graphs/tables, modeling, analysis, justification, and precise written/oral mathematical communication.
- Weeks 18 and 36 are reserved for cumulative semester exams. No instructional unit crosses the semester boundary, and no calendar-specific dates are included.