Grade level: 10th – 12th grade | **Course Title: Financial Algebra** | **Topic/Concept: Stock Market**

Time Allotment: 20-24 days | **Unit Sequence: 1**

Major Concepts to be learned:

- Business Organization
- Stock Market Data and Charts
- Simple Moving Averages
- Stock Market Ticker
- Stock Transactions and Fees
- Stock Splits
- Dividend Income

Expected Skills to be demonstrated:

- The student will be able to compute financial responsibility of business owners.
- The student will be able to use stock data to follow daily progress of a stock.
- The student will be able to create and interpret stock bar charts and candlestick charts.
- The student will be able to find and graph simple moving averages.
- The student will be able to determime the total value of a trade and total trade volumes form ticker information.
- The student will be able to compute gains and losses from stock trades.
- The student will be able to compute fees for buying/selling stocks.
- The student will be able to calculate the post-split outstanding shares and share price for a traditional split.

PA Standards/Anchors:

A1.1.1
A1.1.2
A2.2
A2.5

Eligible Content:

A1.1.1.1.1	A1.1.2.1.1	A2.5.11.A
A1.1.1.2.1	A1.1.2.1.2	A1.1.2.1.3
A1.1.1.1.2	A2.2.11.C	
A1.1.1.3.1		

Instructional Strategies:

- Problem solving activities
- Lecture
- Note Taking
- Homework
- Stock Market Game with monthly journal updates

Assessments:

- Quizzes throughout the unit.
- End of the unit exam.
- Open end questions.

Grade level: 10th – 12th grade | **Course Title: Financial Algebra** | **Topic/Concept: Banking Services**

Time Allotment: 18-20 days | **Unit Sequence: 2**

Major Concepts to be learned:

- Checking accounts
- Reconcile a Bank Statement
- Savings Accounts
- Compound Interest
- Future Value of Inventments
- Present Value of Inventments
- Continuous Compounding
- Future Value of an Investment

Expected Skills to be demonstrated:

- The student will be able to understand how checking and savings accounts work.
- The student will be able to complete a check register and be able to reconcile it.
- The students will be able to compute simple, compound, and continuous interest using the correct formulae.
- The student will be able to calculate and graph the future value of a periodic deposit investment.
- The student will be able to calculate the present value of a single and periodic deposit investment.

PA Standards/Anchors:

A1.1.1
A1.1.2
A2.1
A2.5

Eligible Content:

A1.1.1.1
A1.1.1.2
A1.1.1.4
A1.2.2.1
A2.1.11.A
A2.5.11.A

Instructional Strategies:

- Problem solving activities
- Lecture
- Note Taking
- Homework

Assessments:

- Quizzes
- End of Unit Exam
- Open ended questions
- Keeping a Check Register

Grade level: 10th – 12th grade | **Course Title: Financial Algebra** | **Topic/Concept: Consumer Credit**

Time Allotment: 18-20 Days | **Unit Sequence: 3**

Major Concepts to be learned:

- Introduction to Consumer Credit
- Loans
- Loan calculations and Regression
- Credit Card Statements
- Average Daily Balance
- Credit Cards

Expected Skills to be demonstrated:

- The student will become familiar with the basic vocabulary of credit terms and types of lending institutions.
- The student will be able to compute finance charges for installment purchases, and find monthly payments using a formula.
- The Student will be able to compute finance charges on a loan.
- The student will be able to calculate the present value of a single or period deposit investment.
- The student will become familiar with basic vocabulary of credit cards and compute an average daily balance.
- The student will be able to identify and use the various entries in a crecit card statement.
- The student will be able to calculate the average daily balance and the finance charge using the credit calendar.

PA Standards/Anchors:

A2.2.1 A2.2.8
A2.2.2
A2.2.5

Eligible Content:

2.1.11 2.5.11
2.2.11 2.8.11
2.5.11 A2.5.11.A

Instructional Strategies:

- Problem solving activities
- Lecture
- Note Taking
- Homework

Assessments:

- Quizzes
- End of unit exam
- Open end questions.

Grade level: 10th – 12th grade | **Course Title: Financial Algebra** | **Topic/Concept: Employment Basics**

Time Allotment: 15-18 days | **Unit Sequence: 4**

Major Concepts to be learned:

- Looking For Employment
- Pay Periods and Hourly Rates
- Commission, Royalties, and Piecework Pay
- Employee Benefits
- Social Securtiy and Medicare

Expected Skills to be demonstrated:

- The student will be able to compute periodic salary based on annual contract salary, interpret and express classified a prices as piecewise funcitons.
- The student will be able to compute weekly, semimonthly, and biweekly earnings given annual salary, and compute hourly and overtime pay given hourly rates.
- The student will be able to compute pay based on percent commission, determine piecework pay, and understand advantages/disadvantages of pay based on production.
- The student will be able to understand and calculate the value of certain employee benefits, paycheck deductions for social security and medicare.

PA Standards/Anchors:

A1.1.1
A1.1.2
A2.2
A2.5

Eligible Content:

A1.1.1.1
A1.1.1.2
A1.1.1.4
A1.2.2.1
A2.5.11.A
A2.2.11C

Instructional Strategies:

- Problem solving activities
- Lecture
- Note Taking
- Homework

Assessments:

- Daily warm up exercises.
- 2-3 quizzes throughout the unit.
- End of the unit exam.
- Open end questions.

Grade level: 10th – 12th grade **Course Title: Financial Algebra** **Topic/Concept: Automobile Ownership**

Time Allotment: 22-24 days **Unit Sequence: 5**

Major Concepts to be learned:

1. Classified Ads Costs and Sales Tax
2. Buying and Selling a Car
3. Graph Frequency Distributions
4. Automobile Insurance
5. Linear Automibile Depreciation
6. Historical and Exponential Derpeciation
7. Driving Data
8. Driving Safety Data
9. Accident Investigation Data

Expected Skills to be demonstrated:

- TLW compute the cost of classified ads and the cost of sales tax on automobiles.
- TLW compute the measures of central tendency, range, quartiles, and interquartile range.
- TLW Create frequency distributions, use boxplots and stem and leaf plots to display information and use linear regression to negotiate the purchase or sale of used cars.
- TLW compute insurance costs and compute payments on insurance claims.
- TLW write, interpret, and graph a straight line depreciation equation.
- TLWwrite, interpret and graph exponential depreciation equations and manipulate the equation in order to deetermine time, original price, and depreciated value.
- TLW write, interpret, and use the distance formula and use the formula for the relationship between distance, fuel economy, and gas usage. 8. TLW calculate reaction time and distance, use the braking distance and total stoppig distance in both the english and metric system. 9. TLW determine the minimum skid

PA Standards/Anchors:

A1.2.3
A2.2
A2.5

Eligible Content:

A1.2.3.1.1 A1.2.3.2.3
A1.2.3.2.1 A2.5.11.A
A1.2.3.2.2 A2.2.11C

Instructional Strategies:

- Problem solving activities
- Lecture
- Note Taking
- Homework

Assessments:

- Daily warm up exercises.
- 2-3 quizzes throughout the unit.
- End of unit test.
- Open end questions.

Grade level: 10th – 12th grade | **Course Title: Financial Algebra** | **Topic/Concept: Income Taxes**

Time Allotment: 18-20 days | **Unit Sequence: 6**

Major Concepts to be learned:

- Tax tables, worksheets and schedules.
- Modeling Tax Schedules
- Income Statements.
- Forms 1040EZ and 1040A.
- Form 1040 and Schedules A and B.

Expected Skills to be demonstrated:

- The student will be able to express tax schedules algebraically.
- The student will be able to compute federal income taxes using a tax table and tax schedules.
- The student will be able to construct income tax graphs using compound equations.
- The student will be able to interpret and use the information on a pay stub, W-2 form, and 1099 form.
- The student will be able to complete a 1040EZ, 1040 A and 1040 form along with Schedule A and B.

PA Standards/Anchors:

A1.1.1
A1.1.2
A2.1
A2.5

Eligible Content:

A1.1.1.1.1	A1.1.1.2.1
A1.1.2.1.1	A2.5.11.A
A1.1.1.1.2	A1.1.1.3.1
A1.1.2.1.2	A2.1.11.D

Instructional Strategies:

- Problem solving activities
- Lecture
- Note Taking
- Homework

Assessments:

- Daily warm up exercises
- 2 quizzes throughout the unit.
- End of the unit exam

Grade level: 10th – 12th grade **Course Title: Financial Algebra** **Topic/Concept: Preparing a Budget**

Time Allotment: 16-18 Days **Unit Sequence: 7**

Major Concepts to be learned:

- Utility Expenses
- Electronic Utilities
- Charting a Budget
- Cash Flow and Budgeting

Expected Skills to be demonstrated

- The student will be able to compute the cost of electric, gas, oil, and water for the home as well as electronic utilities.
- The student will be able to compute the cost of using specific appliances for specific lengths of time.
- The sutdent will be able to compute the time it takes an energy-saving appliance to pay for itself.
- The student will be able to create and use a budget matrix. Visualize and interpret a budget using a pie chart, bar graph, line graph and a budget line graph.
- The student will be able to defelop and interpret a cash flow chart, a frequency budget plan, and a year-long expense budget plan.

PA Standards/Anchors:

A1.1.1
A1.1.3
A2.2.2
A2.5

Eligible Content:

A1.1.1.1
A1.1.1.2
A1.1.3.1
A2.5.11.A

Instructional Strategies:

- Problem solving activities
- Lecture
- Note Taking
- Homework

Assessments:

- One quiz.
- End of unit exam.
- Open end questions.