Rapid City
Central High School

Financial Algebra

Course Description: Financial Algebra is a mathematical modeling course that is algebra-based and technology-dependent. The course covers math concepts using eight financial umbrellas: Discretionary Expenses, Banking, Investing, Credit, Employment and Income Taxes, Automobile Ownership, Independent Living, Retirement Planning and Household Budgeting. The course allows students to experience the interrelatedness of mathematical topics from known situations to unknown situations.

Attendance: Students are required to be in school every day. Students are responsible for communicating with their teachers to make up missed learning.

Essential Skills:

Skill #1 - Create Mathematical Representations

Skill #2 - Simplify, Solve, Evaluate

Skill #3 - Analyze and Interpret

Course Expectations: Although not everything is graded, everything is important. In order to demonstrate growth and learning, students will need to:

1. Participate in class activities (take notes, work in a group, complete in class tasks, ask questions) without distractions (cell phones, games, etc.)
2. Use morning time and the teacher to seek help outside of class when needed.
3. Complete all assessments within teacher timelines.

Grading

Learning (Practice) includes instructional activities in and outside of class and are not used in grade determination. Many of these activities will be completed on the NGL SYNC website or as deemed necessary by the teacher. These will be recorded in the student's gradebook, but will not count towards their grade.

Skyward Assessment (Grades) includes quizzes, tests, and projects and will be marked as such in the student's gradebook. Retakes MAY be offered at the discretion of the teacher provided that the student has shown additional understanding of the material after the recording of the initial assessment.

Final Grade	
A	100% - 90%

Last Revised: 8/3/2022

B	80% - 89%
C	70% - 79%
D	60% - 69%
F	0% - 59%

Calculations:

Final Grade Calculation	
Cumulative Grade	**95%**
Final Exam(s)	**5%**

Central High School Courses:

-Will determine grades based on student performance and growth.
-Will not include practice and behavior in grade determination.
-Will give all students regardless of absence an opportunity to demonstrate learning.
-Will not include extra credit.

Instructional Resources: NGL Sync Website, Financial Algebra: Advanced Algebra with Financial Applications Tax Code Update: 2019 Tax Update Edition

Course Calendar/Pacing:

2022-2023 Financial Algebra Pacing Guide

August/September

28	29	30	31	1	2	3
4	5	6	7	8	9	10
11	12	13	14	15	16	17
18	19	20	21	22	23	24
25	26	27	28	29	30	

October

						1
2	3	4	5	6	7	8
9	10	11	12	13	14	15
16	17	18	19	20	21	22
23	24	25	26	27	28	29
30	31					

November

		1	2	3	4	5
6	7	8	9	10	11	12
13	14	15	16	17	18	19
20	21	22	23	24	25	26
27	28	29	30			

December

				1	2	3
4	5	6	7	8	9	10
11	12	13	14	15	16	17
18	19	20	21	22	23	24
25	26	27	28	29	30	31

January

1	2	3	4	5	6	7
8	9	10	11	12	13	14
15	16	17	18	19	20	21
22	23	24	25	26	27	28
29	30	31				

February

			1	2	3	4
5	6	7	8	9	10	11
12	13	14	15	16	17	18
19	20	21	22	23	24	25
26	27	28				

March

			1	2	3	4
5	6	7	8	9	10	11
12	13	14	15	16	17	18
19	20	21	22	23	24	25
26	27	28	29	30	31	

April

						1
2	3	4	5	6	7	8
9	10	11	12	13	14	15
16	17	18	19	20	21	22
23	24	25	26	27	28	29
30						

May/June

	1	2	3	4	5	6
7	8	9	10	11	12	13
14	15	16	17	18	19	20
21	22	23	24	25	26	27
28	29	30	31	1	2	3
4	5	6	7	8	9	10

Chapter 1 – Discretionary Expenses

Pacing: 6 Blocks or 12 days

1-1 Understand how to use mean, median and mode

1-2 Determine and interpret a given data set

1-5 Use Scatter plots to make predictions based on trends of data

Chapter 2 – Banking Services

Pacing: 5 blocks or 10 days

2-1 Explain how checking account works.

2-2 Reconcile a bank statement and a check register

2-3 Make savings account calculations

2-4 Understand the concept of compound Interest

2-5 Make computations using the compound interest formula

Chapter 3 – Consumer Credit

Pacing: 6 blocks or 12 days

3-1 Compute finance charges for installment purchases

3-2 Compute monthly payments and interest on loans

3-3 Calculate interest on student loans

3-5 Compute monthly finance charges on credit cards

3-6 Understand how monthly payments affect the principal, the interest, and the new balance.

Chapter 4 – Automobile Ownership Pacing: 10 Blocks or 20 days	Chapter 5 – Employment Basics Pacing: 5 blocks or 10 days	Chapter 6 – Income Taxes Pacing: 9 blocks or 18 days
4-1 Compute the overall cost of an automobile purchase 4-2 Understand how statistics can represent a set of data and help make decisions. 4-3 Understand the importance of having auto insurance 4-4 Understand the factors the help determine auto insurance costs. 4-5 Understand the short- and long-term costs of automobile ownership. *4-6 Use a linear/exponential system to model automobile expense and depreciation.* 4-7 Use formulas to determine relationships between speed, distance, fuel economy, and gas usage. 4-8 Determine the total stopping distance for an automotive vehicle *4-9 Understand how data is used in an accident investigation.*	5-1 Compute periodic salary based on contract salary 5-2 Model payment procedures algebraically 5-3 Compute pay based on production 5-4 Explain and calculate the value of certain employee benefits. 5-5 Compute mandatory paycheck deductions.	6-1 Compute federal income taxes 6-2 Model a tax schedule 6-3 Determine net pay given gross pay. 6-4 Use appropriate forms to compute tax liability 6-5 Understand how to reduce tax liability
Chapter 7 – Independent Living **Pacing: 8 blocks or 16 days**	**Chapter 11 – Prepare a Budget** **Pacing: 7 blocks or 14 days**	**Chapter 8 – The Stock Market** **Pacing: 7 blocks or 14 days**
7-1 Calculate the costs associated with renting suitable housing 7-2 Read a floor plan and calculate the amount of living space. 7-3 Computer monthly mortgage payment, including principal, interest, property taxes and insurance. 7-4 Estimate closing associate with purchasing a home. Create and interpret amortization tables. 7-6 Explain the advantages and disadvantages of purchasing different types of homes.	11-1 Compute the cost associated with utility usage 11-2 Compute the cost associated with electronic utilities 11-3 Visualize and interpret a budget 11-4 Develop and interpret an expense budget plan 11-5 Use matrices to present budget data	8-1 Calculate associated with owning a business 8-2 Use stock data to follow the daily progress of corporate stocks 8-3 Create and interpret stock market data charts. 8-4 Calculate and graph simple moving averages to identify trends in stock prices 8-5 Interpret stock market ticker information. 8-6 Computer gains and losses from stock trades. 8-7 Computer the fees involved in buying and selling stocks. 8-9 Computer income from long term investments

Chapter 9 – Modeling a Business Pacing: 8 blocks or 16 days	Chapter 10 – Planning for Retirement Pacing: 6 blocks or 12 days	Professional Development
9-3 Describe the slopes of the supply and demand curve 9-4 Used fixed and variable expenses to determine the costs of manufacturing a product. 9-5 Use expense and revenue functions to determine profit 9-6 Determine the breakeven prices and amounts using technology and/or algebra 9-7 Determine the maximum profit and the price at which the maximum is attained. 9-8 Mathematically model a business situation using relationships between and among variables.	10-1 Determine cost associated with retirement savings 10-2 Make calculations associated with social security 10-3 Determine the monthly pension benefits 10-4 Calculate insurance premium costs 10-5 Compare investment plans. * This chapter can be optional.	End of semester/Year First Day of School