

Glendale Unified School District

High School

June 21, 2022

Department: Mathematics

Course Title: Introduction to Financial Literacy

Course Code: 3212D

Grade Level(s): 11-12

School(s)

Course Offered: Glendale High School, Crescenta Valley High School, Hoover High School, Daily High School

UC/CSU Approved
(Y/N, Subject):

Y, (G) Mathematics

Recommended

Prerequisite: Integrated III or Integrated II for seniors

Recommended

Textbook: *Introduction to Personal Finance: Beginning your Financial Journey*, by John Grable and Lance Palmer (First Edition). Wiley Publishers (HMH), 2019.

Course Overview: Financial Literacy is a one-semester introductory course to the basics and fundamentals of personal finance. This course is designed for students who have successfully completed Integrated Math III and want to continue their study of mathematics in a class that is challenging and applicable to their everyday lives. The course will cover financial risk tolerance and goal achievement, compound growth, earnings and income, taxes, banking, credit, savings, investments and planning for the future. Students will apply mathematics concepts from algebra and statistics. This course will encourage students to establish career goals that will provide adequate income and personal fulfillment, give them the skills they need to understand personal financial planning and money management skills and understand personal and societal consequences of financial decisions.

Unit 1: Beginning Your Financial Journey

Learning Objectives:

1. Describe how financial knowledge, experience, risk tolerance, and feelings of control influence the way you view the financial world.
2. Explain how human and social capital relate to financial well-being
3. Discuss how financial risk tolerance relates to financial goal achievement
4. Use their unique time perspective to create SMART financial goals.
5. Describe strategies to overcome mental biases and improve financial decision making and well-being.

Standards: National Standards for Personal Finance Education: **Investing** 12.1, 12.9a, 12.9b, **Managing Risk** 12.1a, 12.1b

Sample Assignments:

- 1) Students will visit the U.S. Census Bureau website and locate the table entitled “Real Gross Domestic Product, Chained (2005) Dollars – Annual Percent Change: 1990 to 2010.” The table provides data showing the percent change in GDP from one year to the next. Students will look specifically for the years 2006, 2007, 2008 and 2009 (these years represent what has since been termed the Great Recession). Students will discuss their observations about what happened during those years and make conjectures based on the data that they observed in a class presentation.
- 2) Students will estimate the payback period for their educational investment. Specifically, calculate how much tuition, books, fees, and other expenses will they incur before they complete their desired schooling. Students will factor in any financial aid or loans that they would receive and the amount of money they would make if they were employed instead of going to school. Once students calculate the approximate total investment in their education, they will then look at what they could realistically earn after graduation in their desired field of study vs. what they would earn without this education, using the U.S. Census Bureau, Bureau of Labor Statistics data. This will enable them to calculate the payback on their investments and do a cost vs benefit analysis.

Unit 2: Tools For Your Financial Journey

Learning Objectives:

1. Discuss the role of compound interest in managing personal finances.
2. Identify how time value of money concepts affect financial goals and decisions.

3. Calculate the effect of time and interest on financial decisions pertaining to planning, investing and borrowing.
4. Describe how to use a balance sheet as a financial management tool to track changes in assets, liabilities, and net worth.
5. Explain how to use a personal budget to track and forecast cash flow to achieve financial goals.
6. Describe how to create a personal financial plan.

Standards: National Standards for Personal Finance Education: **Savings** 12.2a, 12.2b, 12.2 c, **Credit** 12.1a, 12.1b, **Spending** 12.1a, 12.1b, 12.1c

Sample Assignments:

- 1) Students will choose one financial goal that they have that is related to time and money. They will then find the appropriate TVM calculator that is specifically designed for their situation and use this calculator to find answers to justify their financial goal setting. Students will evaluate the information that they receive using the TVM calculator to think about what they would do differently to reach their financial goal.
- 2) Students will conduct an internet search and identify six different methods of budgeting and tracking their expenses. They will list the pros and cons associated with each method, and identify one that they would use for themselves. They will then share the results of their research with others in their class.

Unit 3: Earnings and Income: The Building Blocks of Your Financial Journey

Learning Objectives:

1. Discuss how to create wealth through increasing income, limiting expenses, and investing in your human capital.
2. Identify the different forms of employee earnings.
3. Compare the financial pros and cons of self-employment and ways to structure a business.
4. Discuss the sources and characteristics of unearned income.
5. Explain how to use capital assets to produce income and build wealth.
6. Explain financial safety-net programs available to employees and citizens.

Standards: National Standards for Personal Finance Education: **Earning Income** 12.4, 12.4b, 12.4c, 12.8a, 12.8b, **Investing** 12.6a

Sample Assignments:

- 1) Students will research the arguments for and against raising the national minimum wage to \$15 per hour. They will write the results of their analysis in a short review paper by summarizing the most compelling arguments for increasing the minimum wage, as well as reviewing the most relevant arguments against an increase. Students will then share their findings with their classmates.
- 2) Students will visit an online financial information site (Yahoo! Finance, Google Finance, or dividend.com) and find the current dividend yield for specific stocks. They will then write a report that addresses the following questions:
 - a. What is the average dividend yield for these stocks?
 - b. How does the average dividend yield compare to what you can earn at a local bank or credit union?
 - c. What risks may exist for someone who invests in these securities to obtain the dividends?
 - d. Would you personally invest in one or more of these stocks? Why or why not?

Unit 4: Personal Taxation

Learning Objectives:

1. Explain the purpose and types of taxes.
2. Describe how to calculate taxable income.
3. Describe how to calculate marginal and effective tax rates on income and capital assets.
4. Discuss how federal income tax credits for education, health insurance, and households with children can help to lower income taxes.
5. Explain how to apply Medicare and Social Security taxes to self-employed individuals.
6. Identify income tax-planning strategies to minimize taxes and maximize after-tax wealth.

Standards: National Standards for Personal Finance Education: **Earning Income** 12.6a, 12.6b, 12.6c, 12.7a, 12.7b, 12.7c, 12.7d, **Investing** 12.8a 12.8b

Sample Assignments:

- 1) Students will calculate the amount of tax savings that each of the following items provides if the marginal tax rate is 24% and they are claiming standard deductions:
 - a) \$1000 refundable tax credit.
 - b) \$1000 nonrefundable tax credit.
 - c) \$1000 FOR AGI deduction.

- d) \$1000 FROM AGI deduction.
- 2) Students will find a family member, friend, or other individual who files taxes as self-employed. Find out how they substantiate and keep track of deductible expenses. Write a one paragraph summary of what you learned from your discussion about their record-keeping method.

Unit 5: Checking Accounts, Credit Scores, and Credit Cards

Learning Objectives:

1. Explain the development and purpose of checks and checking accounts.
2. Identify the differences and similarities among debit cards, prepaid cards, electronic transfers, and checking accounts.
3. Determine the costs associated with borrowing money.
4. Know the purpose of a credit report.
5. Describe how credit scores are developed, calculated, and used.
6. Explain the role of credit cards as a financial-management tool.

Standards: National Standards for Personal Finance Education: **Savings** 12.1a, 12.1b, 12.2a, 12.2b, 12.2c, 12.3b, 12.3c, **Credit** 12.2a, 12.2b, 12.2c, 12.7a, 12.7b, 12.7c, 12.7d, 12.8a, 12.8b, 12.8c.

Sample Assignments:

- 1) Students will find out how much banks and credit unions in their area charge in fees for overdraft or insufficient funds. Based on this information they will calculate how much someone would pay if they had five overdraft charges in a year. Then they would write a brief summary of their findings, highlighting which financial institution has the lowest overall cost for overdrafts and share this information in a class presentation.
- 2) Students will calculate the cost of borrowing \$4000 at an annual interest rate of 8.4% for 24 months, while making regular monthly payments of \$181.64.

Unit 6: Loans and Housing Decisions

Learning Objectives:

1. Identify high-cost consumer loans and how to avoid them.
2. Explain the characteristics of a personal loan.
3. Discuss the sources of financial aid and loans available to students.
4. Develop a vehicle-acquisition strategy that uses an auto loan or lease.
5. Know the basics of renting a home or an apartment.

- Describe the necessary considerations and benefits associated with purchasing and owning a home.

Standards: National Standards for Personal Finance Education: **Credit** 12.2a, 12.2b, 12.2c, 12.4a, 12.4b, 12.4c, 12.4d, 12.5a, 12.5b, 12.5c, 12.5d, 12.6a, 12.6b, 12.6c, 12.6d, **Spending** 12.6a, 12.6b, 12.6c

Sample Assignments:

- Students will contact two financial institutions in their community and then complete the following table for each of the credit score ranges.

Lender	Credit Score	Loan Term	APR	Total Finance Charge
Lender 1	Above 720	36 months vs. 60 months		
Lender 1	620-720	36 months vs. 60 months		
Lender 1	Below 620	36 months vs. 60 months		
Lender 2	Above 720	36 months vs. 60 months		
Lender 2	620-720	36 months vs. 60 months		
Lender 2	Below 620	36 months vs. 60 months		

- Students will imagine that they are going to move to their first (or new) apartment in the next 6 months. They will evaluate and rank the following list of amenities that they would want to have in their next rental with 1 being most important and 16 being least important (Laundry in apartment, laundry in complex, dishwasher, indoor parking, pool, fitness center, storage space, garage, fireplace, cable TV included in rent, pets allowed, playground, spa, internet access, balcony or patio, other) . Next, they will conduct research where they want to live to determine if any of their must-haves exist and if yes, what the monthly cost will be. If the rent is too high, students will need to reassess what they can live without to rent an apartment within their budget.

Unit 7: The Foundations of Savings

Learning Objectives:

1. Describe the relationship between investment risk and return.
2. Explain why an emergency fund is critical for financial well-being.
3. Identify the use and benefits of savings accounts, money market savings accounts, and certificates of deposit.
4. Explain how a Roth IRA provides savings and tax benefits.
5. Describe the benefits and limitations of U.S. savings bonds.
6. Discuss the different types of custodial and beneficiary accounts and their appropriate uses.
7. Recognize financial frauds and the strategies to protect against them.

Standards: National Standards for Personal Finance Education: **Earning Income** 12.10a, 12.10b, 12.10c, 12.10d, **Saving** 12.1a, 12.1b, 12.6a, 12.6b, 12.6c, **Spending** 12.8a, 12.8b, 12.8c, 12.8d

Sample Assignments:

- 1) Students will contact three local financial institutions and compare the institutions based on the following fees:
 - a. Monthly account maintenance fees.
 - b. Minimum balance requirements.
 - c. Returned check fees (if a check written from the account cannot be cashed because of insufficient funds).
 - d. Maximum number of withdrawals (both electronically and in person).
 - e. Early withdrawal penalty for certificates of deposit.
 - f. ATM fees.
 - g. Interest rates on savings accounts.
 - h. Interest rates on 2-year certificates of deposit.
 - i. Interest rates on money market accounts (\$1000).
- 2) Students will discuss and write about why a bank would be reluctant to loan money to a minor to buy real estate, a car or another expensive asset.

90-Day Pacing Guide:

Chapter	Number of Lessons	Number of Days
Chapter 1: Beginning Your Financial Journey: The Interior Finance Point of View	5	10
Chapter 2: Tools for Your Financial Journey	6	12
Chapter 3: Earnings and Income: The Building Blocks of Your Financial Journey	6	12
Chapter 4: Personal Taxation	6	12
Chapter 5: Checking Accounts, Credit Scores, and Credit Cards	6	13
Chapter 6: Loans and Housing Decisions	6	13
Chapter 7: The Foundations of Savings	7	15
Chapter 8: Investments	Omit	Omit
Chapter 9: Risk Management: The Role of Insurance	Omit	Omit
Chapter 10: Planning for the Future: Retirement and Estate Planning	Omit	Omit
Review & Final		3
Total	42	90