

## **Financial Algebra**

MTHH 047 055

Credits: 0.5 units / 5 hours / NCAA

### **Course Description**

Financial Algebra is a combination of Algebra and finance taught using applications and project based models. Financial Algebra is a course designed for students who are pursuing a stronger knowledge and skill set of Algebra concepts but are not yet ready for higher-level mathematics. Financial Algebra combines algebraic and graphical approaches with practical business and personal finance applications which help to motivate students to explore algebraic thinking patterns and functions in a financial context.

Prerequisites: Two years of algebra and one year of geometry.

### **Course Objectives**

When you have completed the materials in this course, you should be able to:

1. Make sense of problems and apply mathematical reasoning in solving them.
2. Reason in theory and quantitatively.
3. Construct valuable arguments based upon mathematical information.
4. Read charts to find information.
5. Model mathematical information.
6. Convert word problems to algebraic equations.
7. Investigate and interpret graphs and patterns.

### **Course Outline**

#### **Unit 1: Your Income**

Lesson 1: Investing in the Stock Market

Lesson 2: Owning a Business

Lesson 3: Having a Job

#### **Unit 2: Other Benefits/ Deductions**

Lesson 4: Income Tax

Lesson 5: Social Security and Medicare

Lesson 6: Retirement and Pension

**Unit 3: Banking Services**

Lesson 7: Checking Accounts

Lesson 8: Savings Accounts

Lesson 9: Account Planning

**Unit 4: Consumer Credit**

Lesson 10: Introduction to Credit

Lesson 11: Loans

Lesson 12: Credit Cards

**Unit 5: Owning a Car**

Lesson 13: Buying or Selling a Car

Lesson 14: Costs of Owning a Vehicle

Lesson 15: Driving Statistics

**Unit 6: Independent Living**

Lesson 16: Finding a Place to Live

Lesson 17: Utilities

Lesson 18: Budgeting

**Required Textbook and Materials**

(available through Follett virtual bookstore at <http://highschool.nebraska.bkstr.com>)

Textbook: *Financial Algebra-Advanced Algebra with Financial Applications*, 1<sup>st</sup> Ed. Robert Gerver, et.al. Cengage Learning, 2014. ISBN: **9781285444857**