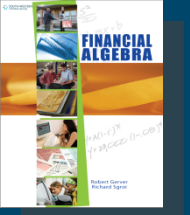
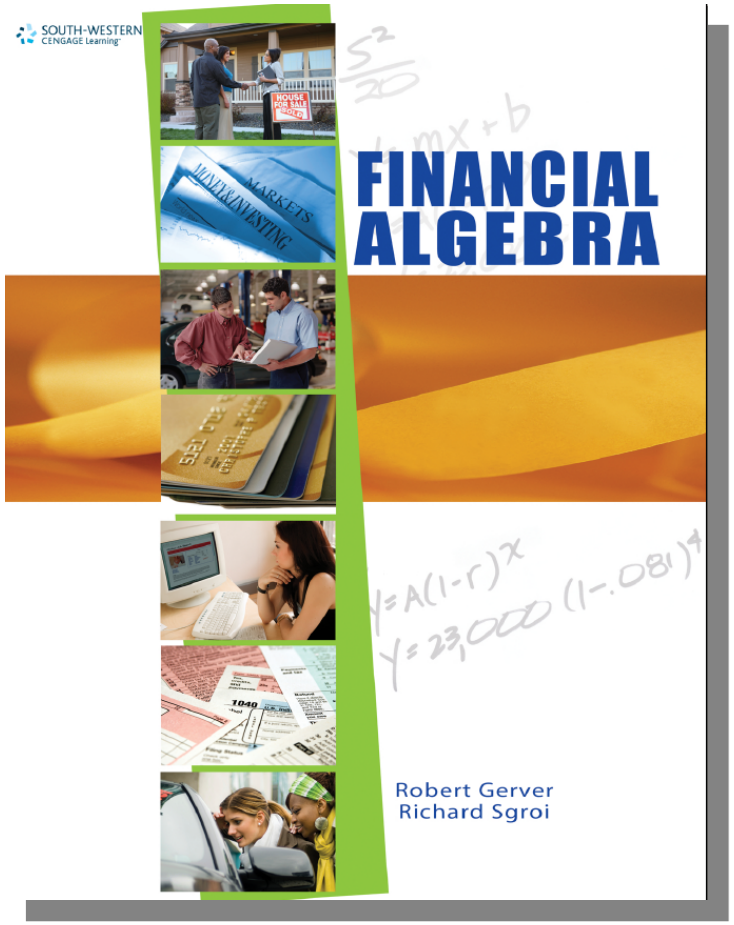


FINANCIAL ALGEBRA:
ADVANCED ALGEBRA WITH FINANCIAL APPLICATIONS



Cengage Learning's

Financial Algebra

is the only textbook aligned with this newly-approved UC a-g course. Advanced Algebra with Financial Applications is a 'c' level mathematics course.

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www.cengage.com/community/financialalgebra

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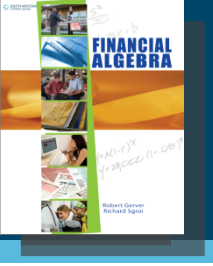


An Approved University of California a-g 'c' - level Math Course

UC University of California *It starts here*

a-g Course Lists

Search Course Lists

- Begin New Search
- Search Results

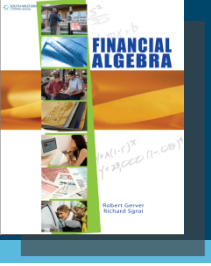
Other Options

- a-g Interactive Guide Site
- a-g Online Update Site

Results: 1 Schools or Programs offering course.

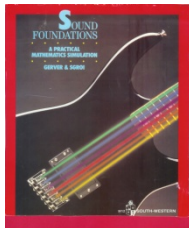
Course Title	School / Program	Subject Area (Category)	CTE
Advanced Algebra with Financial Applications	Bonita High School	Mathematics (Algebra 2)	

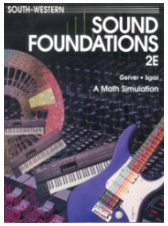
The authors worked closely with a California high school to receive UC approval for "*Advanced Algebra with Financial Applications*" using Cengage Learning's *FINANCIAL ALGEBRA* textbook.

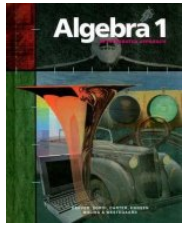


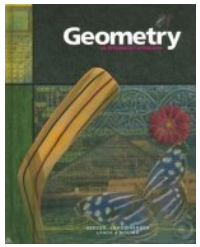
THE *FINANCIAL ALGEBRA* AUTHORS

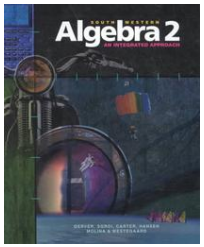
Experienced high school mathematics teachers and high school mathematics textbook authors!

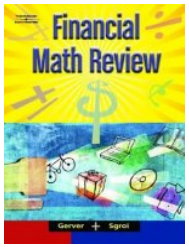


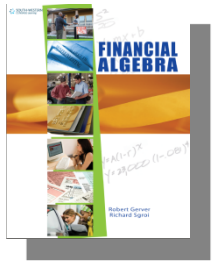












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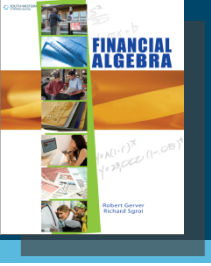
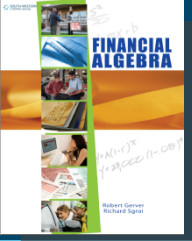


What is Advanced Algebra with Financial Applications?

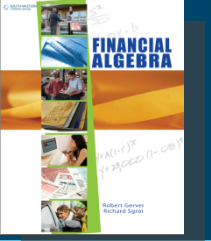
- It is a **mathematically rigorous, advanced algebra** course. (Not an arithmetic-based personal finance course).
- It Includes selected topics from **Algebra 2, Precalculus, Statistics, Probability and Geometry** that are taught at an ability-appropriate level for the Algebra 1-prerequisite audience.
- It has **Algebra 1** as a prerequisite, and Algebra 1 skills are reinforced throughout.
- It is **technology-dependent** and **applications-oriented**.
- It has received **NCAA approval** for mathematics credit.



Selected Mathematics Topics Covered

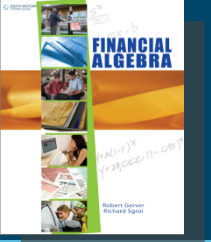
There is an abundance of rich, rigorous, and relevant mathematics content in *Financial Algebra* from Algebra 2, Precalculus, Statistics, Calculus and Geometry, all with an Algebra 1 prerequisite.

- Exponential functions
- Linear regression
- Quadratic-linear systems
- Expected value
- Piecewise functions
- Quadratic regression
- Probability
- Areas of regular polygons
- Functions
- Graphing
- Modified boxplots
- Greatest-integer function
- Limits
- Natural logarithms
- Rational Functions
- Polynomial Functions
- Correlation
- Literal Equations
- Spreadsheets
- Irrational Functions
- Monte Carlo Method
- Moving Averages



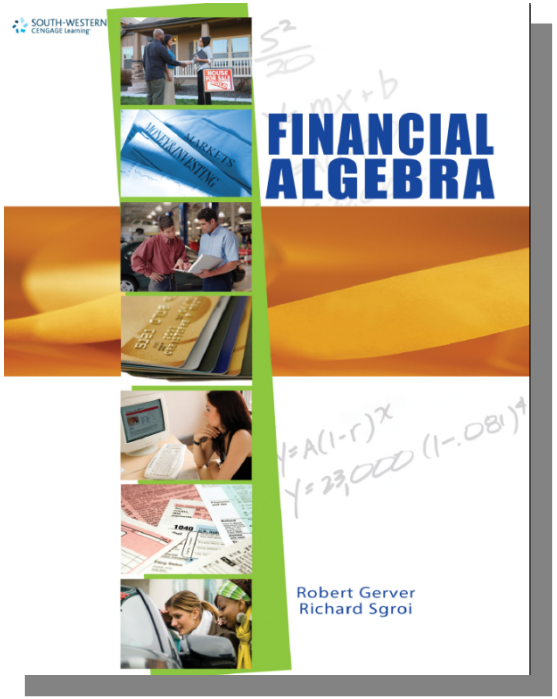
FINANCIAL ALGEBRA is aligned with the NATIONAL COMMON CORE STATE STANDARDS

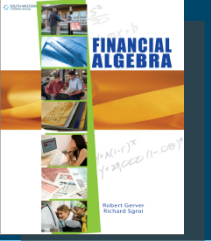
Financial Algebra by Gerver & Sgroi		**Common Core Standard**
In Financial Algebra, the mathematics necessary for daily living is embedded in content that directly relates to financial decisions adults make in their daily lives. The mathematical formulas, functions, and pictorial representations used in Financial Algebra assist students in making sense of the financial world around them through mathematical modeling and, equip them with the ability to make sound financial decisions based on data.		Mathematics| High School Modeling★ Modeling Standards *Modeling is best interpreted not as a collection of isolated topics but rather in relation to other standards. Making mathematical models is a Standard for Mathematical Practice, and specific modeling standards appear throughout the high school standards indicated by a star symbol* (★). COMMON CORE STATE STANDARDS INITIATIVE PREPARING AMERICA'S STUDENTS FOR COLLEGE & CAREER
Financial Algebra Chapter & Section	**Financial Algebra Page Numbers**	**Common Core Standard**
CHAPTER 1		
C1 1-1	Pages 5-9	Algebra - Creating Equations★ A-CED **Creating equations that describe numbers or relationships** 1. Create equations and inequalities in one variable and use them to solve problems. *Include equations arising from linear and quadratic functions, and simple rational and exponential functions.*
		Algebra - Reasoning with Equations and Inequalities A-REL **Solve equations and inequalities in one variable** 3. Solve linear equations and inequalities in one variable, including equations with coefficients represented by letters.
C1 1-2 (continued on next page)	Pages 10-15	Number and Quantity - Quantities★ N-Q **Reason quantitatively and use units to solve problems** 1. Use units as a way to understand problems and to guide the solution of multi-step problems; choose and interpret units consistently in formulas; choose and interpret the scale and the origin in graphs and data displays.
		Number and Quantity - Quantities★ N-Q **Reason quantitatively and use units to solve problems** 2. Define appropriate quantities for the purpose of descriptive modeling.



Financial Topics Covered

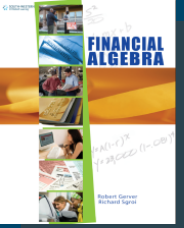
- Investments
- Starting Your Own Business
- Banking
- Credit
- Automobile Ownership
- Employment Basics
- Income Taxes
- Home Ownership
- Retirement
- Budgeting





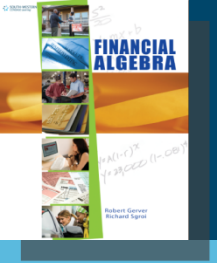
Who is the target audience?

- Students in need of a **third or fourth-year math credit** that is UC a-g approved.
- Students looking to take a **math elective.**
- Students who may have experienced difficulty in Algebra 1 and/or Geometry and may **not be ready for Algebra 2 or Precalculus.**
- Students needing critical financial literacy skills they will need as adults—this is really ***all*** students!



Why should students take Advanced Algebra with Financial Applications?

- It is a chance for students who struggled in algebra and/or geometry to gain confidence in, and an appreciation for, mathematics.
- It allows solid mathematics students to use their mathematics savvy on a daily basis.
- All students *need* this material.
- It offers a mathematics course that addresses a current "hot topic" in education.
- It allows departments to graduate all students with 3 and 4 years of mathematics, and as a result could increase math enrollment.

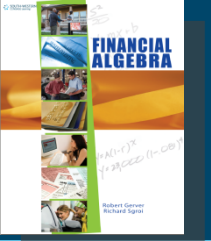


Where can this course fit in the sequence?

Freshman	Sophomore	Junior	Senior
Algebra 1	Financial Algebra	Geometry	Algebra 2
Algebra 1	Geometry	Financial Algebra	Algebra 2
Geometry	Algebra 2	PreCalc/Financial Alg.**	Calculus
Geometry	Algebra 2	Financial Algebra	Precalculus
Algebra 1	Geometry	Algebra 2	Financial Algebra*
-------TWO YEAR ALGEBRA------		Geometry	Financial Algebra
Algebra 1	--------TWO-YEAR GEOMETRY----------		Financial Algebra

**Customize your senior course—a fall semester of matrices, polar coordinates, limits, etc., and then a spring semester of five chapters of Financial Algebra—Automobiles, Employment, Income Taxes, Credit and Banking.*

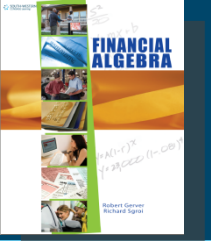
***Financial Algebra can be taken concurrently with Geometry, Algebra 2, or Precalculus, and it can be taken as an ELECTIVE.*



We Can Help With Your UC a-g Approval!

Use this link to familiarize yourself with the UC a-g course approval process:

www.ucop.edu/a-gGuide/ag/course_submissions/



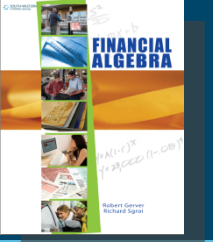
What UC a-g approval resources do we offer?

Go to the Financial Algebra Community website:

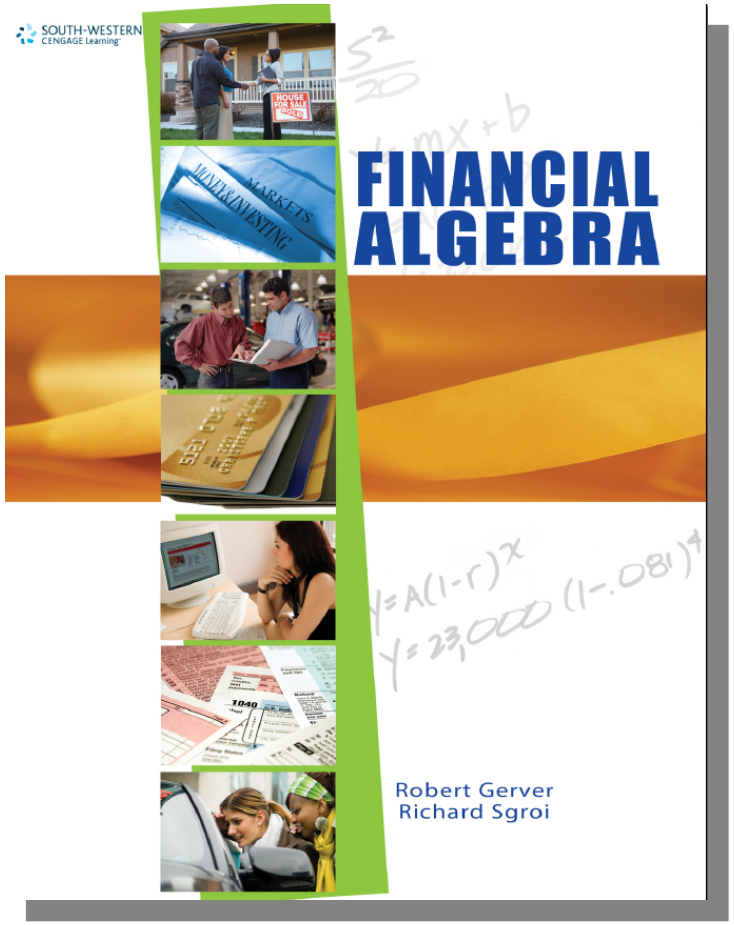
www.cengage.com/community/financialalgebra

Click on the UC a-g Approval Resources tab to find these items which will help you fill out your submission.

- Course Catalog Description
- Recommended Textbook Citation
- Supplementary Resources
- Course Purpose
- Course Outline
- Key Assignments
- Instructional Methods and Strategies
- Assessment Methods



Any questions? Your Cengage Learning rep can put you directly in touch with the authors!



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