



Advanced Financial Algebra Course Syllabus

John Thompson

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COURSE OVERVIEW

Advanced Financial Algebra is a fourth-year mathematics course designed for students who have successfully completed Advanced Algebra. This course extends and deepens student understanding of algebra, functions, statistics, and research design while introducing students to relevant financial and business applications. Students will create, apply, and interpret a wide variety of algebraic function-models to aid in real-world decision making. Statistical research and analysis will be utilized to determine the efficacy of model applications and assist in the decision-making process. Financial contexts for these mathematical concepts will include business operations and optimization, tax applications, banking services, budgeting, investment strategies and retirement considerations, stock market analysis, real estate fundamentals, student loans, and automobile ownership.

Fall Semester

Unit 1: Personal Savings & Consumer Credit	(3 - 4 wks)
Unit 2: Higher Education & Vocational Training	(2 - 3 wks)
Unit 3: Employment Considerations	(2 - 3 wks)
Unit 4: Personal Transportation	(2 - 3 wks)
Unit 5: Housing Options & Related Expenses	(4 - 5 wks)

Spring Semester

Unit 6: Investment Opportunities	(3 - 4 wks)
Unit 7: Retirement Planning	(2 - 3 wks)
Unit 8: Business Finance & Economics	(4 - 5 wks)
Unit 9: Financial Statistics & Research	(4 - 5 wks)

COURSE MATERIALS

Students will need a 3-ring binder with loose-leaf notebook paper, pencils and eraser. They should also bring their school assigned chromebook to class every day charged to access any digital resources that have been made available. Students will have access to the web-based Desmos calculator on their chromebooks, and I also have a class supply of calculators that students may use during class. If a student feels the need to have their own handheld calculator (for homework / SATs / etc.), we use the Texas Instruments TI-30XS in class.

ASSIGNMENTS & GRADING

Student grades are averaged within two categories of assignments / assessments outlined below.

Formative (60% of overall grade)

Warm Ups, Daily Work, and Homework

Summative (40% of overall grade)

Quizzes, Projects, and Unit Tests

Students are expected to **neatly show all of their own work with solutions clearly indicated** on all math problems. Partial credit will be given to incorrect solutions with work containing only minor errors. If the student's work is missing, illegible, or otherwise does not support the indicated solution then no credit will be given.

The use of technology such as online problem solvers or AI or any other means that circumvents genuine individual student learning and thinking is considered cheating. A student's first cheating offense will result in a grade of 0% for the assignment / assessment and the student's parents will be contacted. Subsequent offenses will also result in administrative referrals for academic dishonesty.

FREE TUTORING

If a student needs additional instructional support outside of class they may request to attend a free tutoring session with me before or after school. Tutoring is intended to supplement classroom instruction, not be a substitute for it, and requests from students who do not actively participate in class will be denied. Tutoring is also student directed, and so students should come prepared with specific questions / topics that need to be addressed.

CREDIT REDEMPTION

If a student scores below 70% on a summative assessment, they may be eligible to retake that assessment for up to 70% credit. It is the student's responsibility to make timely arrangements to retake any failed assessments and associated tutoring.

ABSENCES & LATE WORK

Students who are absent are still responsible for all missed instruction and assignments regardless of the nature of the absence. Those students with a valid school excuse (see Student Handbook) will not be penalized for as many days as they were excused, up to one additional week. Assignments that are otherwise turned in after their due date will receive the following late penalties:

Less Than 1 Week Late
70% Credit Maximum

More Than 1 Week Late
50% Credit Maximum

Summative assessments will never be marked late, but will be marked missing (and therefore count as a 0% in the grade book) until the student makes up the assessment. It is the student's responsibility to make timely arrangements to make up any assessments.

GENERAL AVAILABILITY

My general availability for tutoring, retakes, and makeups is as follows:

	MON	TUE	WED	THU	FRI
Mornings (7:45a - 8:15a)	✓	✓	✓	✗	✓
Afternoons (3:30p - 4:00p)	✓	✓	✓	✗	✗

Students must request my time at least one day in advance to check for my availability and to receive a hall pass.

BEHAVIOR POLICIES AND PROCEDURES

Students will be expected to...

... FOLLOW SCHOOL RULES

- ★ Be in your seat and quietly ready to begin class as soon as the tardy bell rings.
- ★ Have all personal electronic devices silenced and stowed at all times.

... RESPECT OTHERS

- ★ Do not speak out of turn, use disrespectful speech, or otherwise be disruptive in class.
- ★ Remain in your seat unless you have permission to get up and move about.

... ACTIVELY PARTICIPATE

- ★ Refrain from eating, drinking, grooming, sleeping, shopping, gaming, movie watching, etc. during class.
- ★ Listen attentively to instruction and readily engage in assigned tasks until the release bell rings.

Unless otherwise specified in the Student Handbook, failure to meet these expectations will be subject to the following behavior plan:

1st Offense
Verbal Warning

2nd Offense
Parent Contact

3rd+ Offense
Administrative Referral

ACKNOWLEDGEMENT

I hereby certify that I have read and understood the contents of this syllabus.

Student Name: _____ Signature: _____ Date: _____

Parent Name: _____ Signature: _____ Date: _____