



Math Electives:

Bridge to Algebra 2

Are you a little nervous about taking Algebra 2 next year? Are your Algebra skills a bit rusty? Do you wish you could re-do Algebra 1 but don't want to take the whole year-long course over again? If you answered yes to any of these questions Bridge to Algebra 2 is for you! This semester-long course is just the boost you need in your Algebra skills to be über ready for Algebra 2 second semester. Readiness = Success!

Financial Algebra

This course can be taken any time after Algebra 1. What's funny is that the original intent of this course was for students who did not want to take Precalculus or needed more math experience prior to Algebra 2. This all sounds a little depressing; however, what students will get from **Financial Algebra** is arguably (and it is not a hard argument to make) the most important (and if not that, then definitely applicable) knowledge of their entire K-12 education.

Wait! This all sounds arrogant and not possible. Let me ask everyone a few questions. Will you ever...Buy a car? Buy a house? Buy property? Work for or own a business? Work in the public sector? Pay sales tax? Pay property tax? Pay utility bills? Make a personal budget? Own a stock? Have a savings account? Own a bond or CD? Rent an apartment/property? Invest in a 401K or IRA? Use a credit card? Pay fees for financial services? Pay property tax? Pay Medicare? Use Medicare? Pay Social Security? Use Social Security? Pay federal income tax? Pay for higher education? Purchase auto insurance? Buy health insurance?

You should have answered yes to nearly all of those questions. No answers mean that you did not understand the question (and should have answered yes), you will go to prison at some point, and/or you may not be making informed financial decisions in the future. You will learn the financial terminology, laws, theories, and the mathematics operating these topics. You will use them in your life for sure. Pay attention and take this course seriously. Checkmate.

Trig/Stats:

This is a semester long course for students who have successfully completed Algebra II. In this course we will explore all the major topics in plane trigonometry with a focus on establishing the connections between trigonometry and other areas of mathematics, particularly connections with algebra and geometry. This course is intended to prep students for the rigors of a full year long class in Pre-calc. We cover material at a kinder, gentler pace. Success will depend on:

- developing a strong foundation of trigonometric concepts
- use reasoning and problem-solving skills to connect concepts and find solutions
- the ability to communicate mathematical concepts and procedures
- the ability to make connections within trigonometry, to other subjects, and to real world situations

Pre-Calculus:

Pre-calculus explores a wide variety of mathematical topics that are both valuable and foundational. Imagine the number 5. How could you change it into the number 7? We call the operation that changes the first number into the second number a "function." Now prepare to generalize. Imagine all numbers.....no, **all** of them. OK, now imagine all of them changing into new values. Focus on the change, not the results. The change will follow a predictable and repeatable set of rules. Sometimes the rules are simple, such as "Add 2," and sometimes the rules are more complex. Pre-calculus studies the rules of change.

AP Statistics:

"Statistical thinking will one day be as necessary for effective citizenship as the ability to read and write."

-- H. G. Wells (1866-1946)

"Statistics: the art and science of making good decisions in the face of uncertainty."

-- sounds like something useful for most of life.

Welcome to A.P. Statistics. More than 80% of all college students take Statistics as a requirement towards their major field of study. By passing the A.P. test in May you may be able to waive that requirement and obtain up to 5 math credits. This information will be discussed during the year.

1. COURSE OBJECTIVES—what successes are we targeting?

- a. demonstrated mastery of the AP Stats curriculum as determined by the College Board.
- b. use the tools of statistics to develop good problem-solving, critical thinking, and citizenship skills.
- c. prepare for further success in college-level mathematics
- d. keep college major and subsequent career options open.

AP Calculus:

Calculus describes change and how changes change. It also helps you see that the accumulation of infinitely small bits can add up to a sizable quantity. It is the first modern math class. You need it for business, medicine, engineering, the sciences, and for a thorough understanding of life. After all, there is not much that stays the same; things are always changing around us. Calculus sounds cool, it is. Calculus sounds rewarding, it is. Calculus sounds challenging, it is. Calculus is in room 107, it's fun and it's you.