

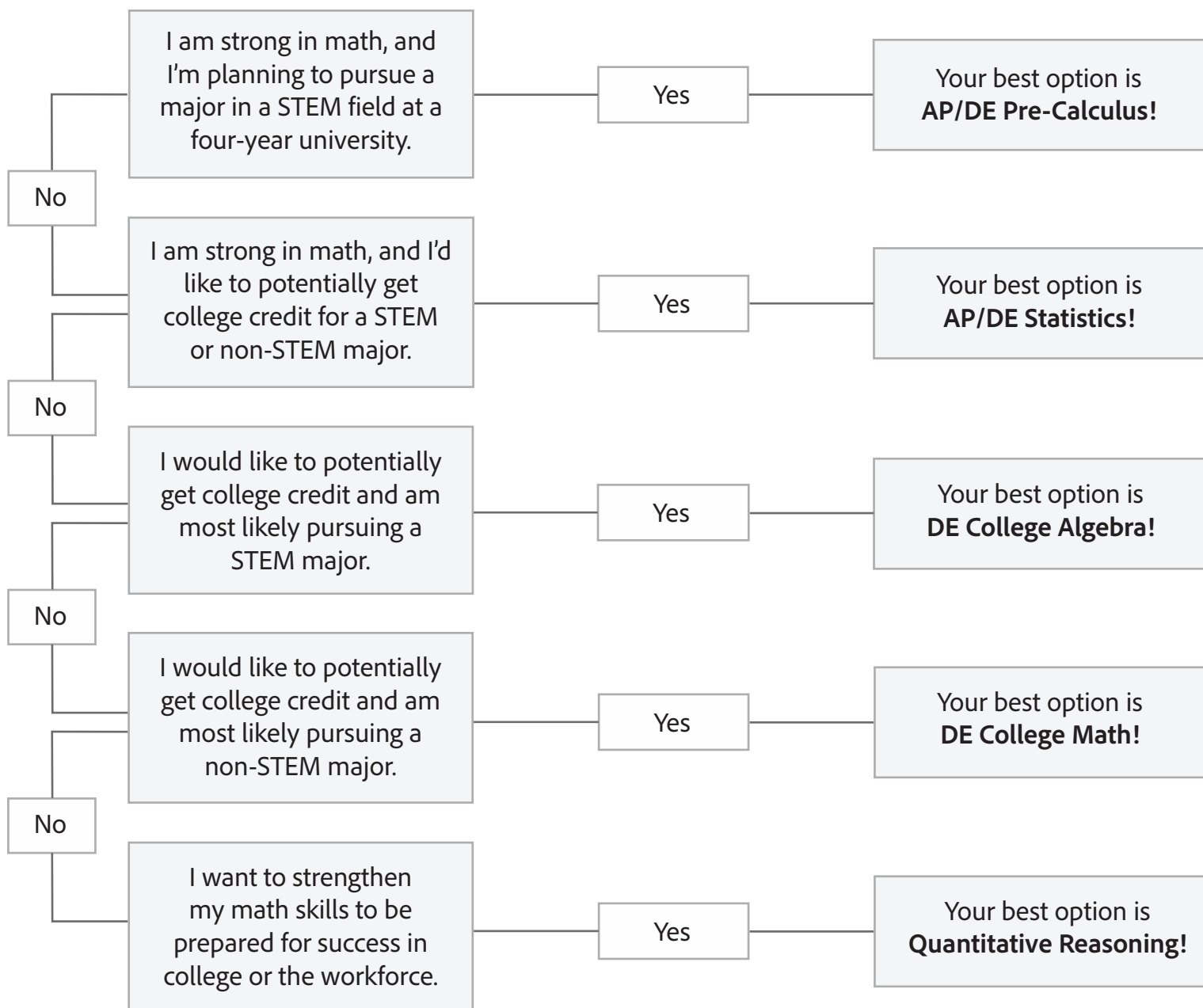
FHS FOURTH-YEAR MATH

My post-graduation plan is:

My high school grades in math so far: Algebra 1: _____ Geometry: _____ Algebra 2: _____

Knowing my future plans and what I've done up to now, what math class should I take next year?

Start here!



FOURTH-YEAR MATH COURSE DESCRIPTION

Quantitative Reasoning

This course is designed to build student awareness and develop a positive attitude, understanding, and confidence using mathematics in the content areas of finance, growth, probability, statistics, and common applications encountered in society.

This class is not recommended for students who intend to take Pre-Calculus the following year.

College Math (Dual Enrollment)

College Math (Applied Mathematics) is an introductory college-level math course (as well as math for the trades). Topics include: algebra review, introductory statistics and probability, linear and exponential models of growth and decay, financial literacy (savings, loans, taxes), applied modeling, and (trade specific math).

Students have the option of taking this course as a Dual Enrollment (DE) course with Coconino Community College (CCC - MAT 140). This course satisfies university math requirements for many non-STEM majors. Students taking this course are NOT planning on pursuing STEM majors in their plans after high school.

Students taking this course should have earned a C or higher in Algebra 2 and be prepared for a fast paced course covering a broad range of concepts, including written responses.

College Algebra (Dual Enrollment)

College Algebra is an introductory college-level math course. Topics include: functions, systems of equations, matrices, solving equations, logarithms and exponentials, and complex numbers. Students have the option of taking this course as a Dual Enrollment (DE) course with Coconino Community College (MAT 151). **Students interested in STEM degrees should consider enrolling in College Algebra or Pre-Calculus as this will better prepare them for STEM college degrees.**

Students taking this course are planning on continuing with their math education in college. This course is also a preparation course for students to take Pre-Calculus. Students taking this course should have earned a B or higher in Algebra II and be prepared for a fast paced course covering a variety of Algebra topics.

AP Statistics (Dual Enrollment)

AP Statistics is an introductory college-level statistics course that introduces students to the major concepts and tools for collecting, analyzing, and drawing conclusions from data. Topics include: selecting methods for collecting and/or analyzing data for statistical inference; describing patterns, trends, associations, and relationships in data; exploring random phenomena with probability and simulation; developing an explanation or justifying a conclusion using evidence from data, definitions, or statistical inference.

Students will have the option of taking an AP exam in May to earn 3 credit hours for college (equivalent to STA 270 at NAU). Practically every major requires a course in statistics since it is the foundation for research methods in many fields, especially the social sciences (psychology, political science, etc.), business, and environmental sciences.

Students taking this course should have earned an A or B in Algebra 2 and be prepared for extensive reading and written justifications. Students should be prepared for a fast pace and have a history of completing all assignments on time.

All students are expected to take the AP exam at the end of the year.

AP Pre-Calculus (Dual Enrollment)

Pre-Calculus is a course to prepare students for Calculus (even business majors have to take a calculus course at most universities). Topics include: functions and their graphs, polynomial and rational functions, exponential and logarithmic functions, trigonometry, analytic trigonometry, additional topics in trig, systems of equations and inequalities, matrices and determinants, sequences, series, conic sections, parametric equations, polar coordinates and their graphs, polar equations, graphing in three dimensions, and an introduction to limits in calculus.

Students have the option of taking this course as a Dual Enrollment (DE) course with Coconino Community College (CCC - MAT 187). STEM (science, technology, engineering, and math) and quantitative business major students (accounting, finance, etc.) will need this course to prepare them for success in Calculus.

Students taking this course should have earned a high B or A in Algebra 2 and be independent learners. Students should be prepared for a fast pace and have a history of completing all assignments on time.

All students are expected to take the AP exam at the end of the year.