

4th Math Course Selection Guidance

<p style="text-align: center;">North Carolina Math 4 (Abbreviation NC.M4) and North Carolina Math 4 Honors (Abbreviation NC.M4H)</p> <p>Description of the Course:</p> <ul style="list-style-type: none"> • Primary focus: functions and statistical thinking • Designed to be a capstone to introductory statistical concepts required in many college majors • Intentionally integrates concepts from algebra and functions to demonstrate the close relationship between algebraic reasoning as applied to the characteristics and behaviors of more complex functions 	<p style="text-align: center;">Precalculus (Abbreviation PC)</p> <p>Description of the Course:</p> <ul style="list-style-type: none"> • Primary focus: functions and trigonometry • Course does not contain statistics • Builds on students' algebraic skills and understanding of functions to delve into real world phenomena and to deepen understanding of the functions in the course.
<p>Major Topics of the Course:</p> <ul style="list-style-type: none"> • Operations with Complex Numbers • Properties and operations with matrices and vectors • Trigonometry: Law of Sines and Law of Cosines; Graphing (sine and cosine) • Function focus: Logarithmic and Piecewise • Regression models (creating and using equations from a data set) • Statistical investigations and inferences • Probability Distribution: Normal Distribution 	<p>Major Topics of the Course:</p> <ul style="list-style-type: none"> • Operations with Complex Numbers • Properties and operations with matrices and vectors • Trigonometry: Solving Equations (using trig identities and properties), Parametric equations, graphing (sine, cosine, tangent, cotangent, secant and cosecant), Unit Circle, Solving Triangles • Function focus: Rational, Polynomial, Exponential, Logarithmic, Power, Conic, Parametric, Recursive, Inverse, and Composition of functions
<p>Considerations for taking this course:</p> <ul style="list-style-type: none"> • Designed for students pursuing careers in non-STEM fields • Post high school plans include a major that requires taking an entry-level Algebra or Introductory Statistics course 	<p>Considerations for taking this course:</p> <ul style="list-style-type: none"> • Designed for students pursuing careers in STEM-related fields • Will prepare students for Calculus, AP Calculus and any entry-level college course

FAQs:

Question:	Answer:
What is the difference between Math 4 and Math 4 Honors?	While they have the same standards, the difference is in the delivery of instruction and the expected level of complexity and precision of student work.
Can a student take AP Stats after Math 4 Honors?	Yes
Are AFM and Math 4 the same course?	No, they have different standards.
Can a student get credit for both AFM and Math 4?	Yes
If a student takes both Math 4 Honors and Precalculus, will they get credit for both?	Yes. The first one taken would count as the 4 th math credit and the other would count as an elective. (Once a student completes the 4 th math requirement, all future math courses count as elective credits, regardless of the courses.)
Can a Math 4 student take AP Stat or Precalculus?	Yes. The chart below shows typical paths, but not all paths.
Can a student take Discrete Math or AP Statistics as their 4 th math course?	Yes, both of these would meet the 4 th math requirement. However, students who have completed Math 4, Math 4 Honors, or Precalculus before taking these courses would have a stronger foundation.
If a student takes Discrete Math for Computer Science Honors, do they have to take a computer science course?	No. While there are computer science standards in this course that lay a foundation for a computer science course, it is not required that a student would go on to take a computer science course.

Typical Choices for Math Courses Beyond Math 3

