That One Math Guy
Course Syllabus

General Information

Class: Pre-Calculus: College Algebra (MTH-PC)
Website: www.thatonemathguy.com
Time: Monday 1:30 - 3:00 & Thursday 1:30 - 3:00
Location: Monday - Raleigh, Thursday - Cary
Online Classroom: https://us02web.zoom.us/j/87877908768

Course Description

Pre-Calculus: College Algebra, the first class in a two semester sequence, is designed to prepare students for calculus and advanced algebraic thinking. This first semester course reviews advanced functions and modeling, while the second semester course (Pre-Calculus: Trigonometry) covers trigonometric proofs and reasoning required in calculus. Upon completion, students will have an understanding of the mechanics of functions and their representations within a two and three dimensional space, exposure to advanced modeling and extrapolation techniques, and basic, conceptual knowledge of the fundamental principles of calculus.

Like all That One Math Guy (TOMG) classes, Pre-Calculus: College Algebra is driven by application and a deep, conceptual understanding of the mechanics and reasoning of math in a two and three dimensional space. Students will investigate relationships between numbers and the real world, explore patterns and build their own rules, and simply play with math.

Class Composition

Each class begins with a thorough review of topics presented during the previous period and seamlessly transitions to introducing two to three major lessons through thoughtful analysis, analogies, and practical applications. Students are given time to practice each new skill through group and individual work as well as teacher-led remediation.

Students should spend class time focused on understanding concepts, not feverishly writing down information in order to decipher it later. To alleviate any anxiety and promote a greater understanding of the material, all classes are recorded and class notes made available on the class website by the following day.

Homework

Homework is an unfortunate, yet necessary evil. With such limited class time, students are given both paper-based and interactive online assignments to complete each week. These assignments are designed to review essential content learned earlier in the week and prepare students for eventual quizzes and tests. Students should initially focus on paper-based assignments, which are available to print on the class page, in order to practice basic skills before moving to the online homework on www.classmarker.com. Ideally, students should attempt to set aside time for math each day.

Online assignments are fully automated and interactive, providing instant results and remediation for students. Completion of online homework also results in an additional point on the accompanying quiz. To further encourage students, quiz questions, while random, are often taken directly from the homework problem set. **Students will have up to two weeks to complete the quiz once it opens. No extensions.**

Quizzes

Weekly quizzes are relatively short (5-10 questions) and designed to promote student ownership and accountability. All quizzes are taken online and outside of class time. Students will be given the opportunity to earn up to 6 points on each quiz (including 1 additional point from interactive homework), though each quiz is actually out of only 4.8 points. This means a perfect score yields students 6/4.8 points or 125%. Therefore, each quiz offers students the ability to earn extra credit through consistent work and preparation. **Students will have up to two weeks to complete the quiz once it opens. No extensions.**

Testing

Tests are proctored at home under parental supervision in order to conserve class time. Students are permitted unlimited time provided the test is completed during one sitting (unless otherwise specified). Tests are due two weeks from the date of the assignment and are available either through email or on the parent class page.

Please allow approximately one week for grading.

Students are held to a strict honor code and are not permitted to discuss test content. Discussing the test, providing answers, or using unsanctioned resources may result in a zero.

Parents, please understand your level of involvement can artificially inflate test scores. As homeschool parents, you have final authority over grades. I hope that you will work with me to ensure students' grades are a true reflection of their individual knowledge and effort.

Depending on course content, students will have a test every 2 to 4 weeks for a total of 4 to 7 tests a semester. Please see the class web page for a complete list of week-to-week content and test weeks.

Grading

Student grades are essentially based on the following formula:

Tests & Projects	60%
Quizzes & Homework	40%

Our course follows a basic 10 point scale:

90 - 100	=	A
80 - 89	=	B
70 - 79	=	C
60 - 69	=	D
59 - below	=	F

Parents are able to view student's grades and progress through https://app.schoology.com/login. Information regarding access is available on the class page.

Absences

One of the many wonderful aspects of homeschool education is the inherent flexibility in creating your own schedule. Absences are bound to occur, either through illness or extracurricular activity. Please refer to the website for any recordings, missed assignments, and class notes.

All work missed due to activity or illness may be excused upon parents' request.

Teacher Information

Cell: (919) 520-5110
Email: ndsorenson@gmail.com

Conferences available upon request. Please allow 24 hours for email or text inquiries. Grades are available through https://app.schoology.com/login (more information to come).

Full disclosure, I have an incredibly busy teaching schedule this year. I will do my absolute best to devote every ounce of energy and concentration to my students both inside and out of class. Between teaching, grading papers, creating content for the website, and my lecturing responsibilities at NC State, my time will be constricted.

If you have a question, however, please ask. If you have a concern about your child, please share it. If you have a desperate need to tell me I'm awesome and my hair looks amazing, please relay that as well. I love me some me. Just please be a little flexible in my response time.

Thanks

I am so incredibly thankful for the opportunity to teach your child and play a small part in their personal and academic success. Please let me know if you have any questions. I am looking forward to an exciting and rewarding year!