New Paltz Central High School

New Paltz Central School District 196 Main Street, New Paltz, New York 12561

The New Paltz Central School District exists to serve all children in our community. We are committed to fostering a cohesive and inclusive culture from Pre-Kindergarten through 12th grade, across all buildings and departments. We affirm and respect every student's identity. This includes, but is not limited to, honoring their preferred name and pronouns.

Instructor: Ms. Kathryn Stewart Where to find me: room 137 or 214A Phone: (845) 256-4175 ext. 69547 Email: kstewart@newpaltz.k12.ny.us

Welcome to Introduction to Calculus

In this course, we will begin with precalculus concepts and then move into learning calculus! We will explore topics graphically, numerically, analytically, and verbally. The intent is to move beyond algebraic and symbolic aspects of calculus and give meaning and understanding through applications. Be prepared to work on problems that you may not know how to approach; that's what mathematics is all about! And be prepared to explain your thinking verbally and in writing.

Homework is assigned regularly and may take the form of a problem set or a video. The idea of the video lessons as homework is to allow us more class time for group work and for deeper and more complex problem solving projects.

The goal is to build mathematical reasoning, communication skills, conceptual understanding, procedural fluency, and to help us all appreciate and enjoy mathematics. This approach is directly aligned with New York's Next Generation Learning Standards.

Course Topics:

- Functions and Average Rates of Change
- Linear Functions, Power Functions, Polynomial Functions, Rational Functions
- Conic Sections
- Exponential and Logarithmic Functions
- Trigonometric Functions and Identities
- Limits and Their Properties
- The Derivative
- Basic Differentiation Rules and Rates of Change
- Implicit Differentiation
- Applications of Differentiation

Daily Check: 5 points

A short daily quiz ("daily check") will be given at the beginning of most classes. The daily check will be based on the homework and/or material from the previous class. Each quarter, three to four of your lowest daily check grades will be dropped. If you miss a daily check due to an absence, you may make up the daily check as long as you make it up <u>before</u> the next class. If not, a missed daily check will count towards one of the dropped daily checks.

Homework will be given on a daily basis. If the homework is a video lesson, take notes and come to class prepared to take a daily check on the content. If the homework is a problem set, solutions and/or answers will be posted in Google Classroom. You are expected to do the homework, as needed, and check the solutions as you work. If you get stuck on a problem, work through the solution to see if you can figure it out that way. If you have questions on homework problems, come work with me after school or during the

day before class or email me and I will help you. As a rule, we will not be "going over" homework in class.

Class Work: If you miss class, go to Google Classroom and find the classwork (posted as *Material*, not as an *Assignment*) and do the work you missed so you are up to date when you return to class.

Quizzes: 20 to 50 points

There are usually 3 to 5 quizzes per quarter. If you miss a quiz due to an absence, you will be expected to take the quiz the class you return. We generally do not cover any new material the class before a quiz, so if you miss the class before a quiz, you will be expected to take the quiz with the class. Use the materials on Google Classroom to work on practice materials and sample quizzes.

Opportunities to Demonstrate Mastery/Retakes of Quizzes for full points back

If you do not perform the way you wish to on any quiz, you may retake the quiz (or portions of the quiz) to demonstrate your new understanding of the content and get full points back. In order to do this, you must:

1) do corrections on the quiz; 2) do additional practice on the concept(s) you didn't fully understand; 3) arrange a time to retake the quiz. You may retake quizzes until you feel you've demonstrated your understanding fully. All retakes need to be completed by the end of each quarter, and no retakes will be allowed the last week of the quarter (unless you make special arrangements with me).

Your Grade: Your quarter average can be determined at any time by adding up the number of points earned and dividing it by the total number of possible points. I update PowerSchool regularly.

NO Calculators: Please note that students will NOT be using calculators in this course! (You're going to be freed from the bonds of calculator dependence!!!)

Missing Class: If you miss class, you are expected to look on our Google Classroom (GC) to see the Classwork you missed (posted in GC as *Material*) and what Homework was assigned (posted in GC as *Assignment*.) You are also encouraged to come find me before the next class, either after school or during the day, to take the daily check you missed and to learn any new material we covered so you're prepared for the next daily quiz. Remember: If you plan to make up a missed daily check, you need to make it up **before** the next class. The district attendance policy can be found on page 49 of the District Code of Conduct.

During School/After-School Help:

Please come after school anytime if you have questions or need help on anything. You may also make arrangements to work with me during school when I don't have a class. You can find me in the math office (room 214A) or in room 137 after school every day. I am often here until the cows come home, so drop by anytime. You may also reach me through e-mail at kstewart@newpaltz.k12.ny.us.

Cell Phone Policy: Research clearly shows that cell phones interrupt learning, focus, and our ability to enjoy a learning community. I will be enforcing our district's cell phone policy as found starting on page 29 of the 2025-2026 code of conduct.

Google Classroom:

I will post all assignments, solutions to homework questions, video lessons, and announce upcoming quizzes and projects on our Google Classroom page, so check that regularly. In addition, I post quiz reviews with complete solutions and extra practice problems that can help you at home.

Let's work together to make this a productive and safe year for all of us!