

# Calculus Course Information

**Overview:** Calculus starts students on a different branch of math than the strictly algebraic one they have been used to. There is a heavy emphasis on functions and an extension of trigonometry concepts that were introduced in Pre-Calculus. Additionally, there are plenty of real life applications presented. Some of the main concepts in the course include limits, Riemann sums, integration, differentiation, areas under a curve, optimization, volumes of revolution, differential equations, and series tests. This course is an early transcendental Calculus course with the intention of preparing and equipping students to succeed in a college Calculus track.

Please see the [Calculus Scope and Sequence document](#) for a more complete list of course content and structure.

**Assignments/Homework:** Assignments are usually about 15-20 problems and should take around 45 mins. to 1 hr. to complete. Upon completion, assignments are to be corrected by the student and reviewed to determine what (if any) questions the student has going into the next class.

**Quizzes and Tests:** Regular quizzes and tests will be administered throughout the course. Generally, these are meant to be taken without books, notes, or other forms of help. However, various resources will be allowed depending on the content. Formal tests are taken via the traditional “paper and pencil” format. They are then turned in for correction by the teacher.

## Materials/Supplies:

- Students are expected to take notes during class. A binder or notebook typically works the best.
- Graph paper
- Scientific calculator  
Note: Optionally, a graphing calculator may be used, but various websites and similar functioning computer programs will be used. Therefore a graphing calculator is not mandatory.
- Scanner