

Pre-Calculus

Mr. Heyd

JHeyd@Iroquoisced.org

(716) 652 – 3000 Ext 7102

COURSE DESCRIPTION

Exploring a deeper relationship between advanced algebra topics and trigonometry, Pre-Calculus is an informative introduction to calculus that challenges students to discover the nature of graphs, nonlinear systems, and polynomial and rational functions. With an emphasis on mathematical reasoning and argument, this advanced course scaffolds rigorous content with clear instruction and an array of scaffolds for learning, providing students with a deep understanding of topics such as matrices, functions, graphing, logarithms, vectors, and conics. The course concludes with a brief introduction to calculus that exposes students to limits and derivatives.

STUDENT EXPECTATIONS:

This course requires the same level of commitment from you as a traditional classroom course would. Throughout the course, you are expected to spend approximately 5–7 hours per week on the following activities:

- Lessons that include a mixture of instructional videos and tasks
- Assignments in which you apply and extend learning in each lesson
- Assessments including quizzes (online and in class), tests, and cumulative exams

ATTENDANCE

Students who miss a quiz/test/project for any reason must see their teacher to make up (or make arrangements to make up) the quiz or test ***immediately*** upon return to school whether or not it is a math day. Following any absence, students are *expected* to have their notes from **another student** (or the web-site) and make up assignments *immediately*. **Be sure you understand the attendance policy. Too many absences could result in course failure!**

Note: In the event of a prolonged absence (three or more consecutive class periods), the teacher will work with the student to establish a schedule for making up assignments, quizzes, projects, and/or tests. It is expected the student will see the teacher immediately upon return.

REQUIRED MATERIALS:

Each student is required to supply themselves with a pen, a ruler, a graphing calculator (Ex: Ti-83/ Ti-83 Plus/Ti-84), folder, school issued PC, and stylus pen. If you forget a graphing calculator for a quiz, test, or exam, **YOU MAY NOT BORROW ONE!**

TEXTBOOK:

You can find the textbook at <https://openstax.org/details/books/prec calculus>. We will be using this on-line textbook for all lessons and homework assignments. Additionally, we will use this book for unit 1: <https://openstax.org/details/books/algebra-and-trigonometry>.

HOMEWORK:

Homework will be assigned daily. Homework gives students a chance to practice what they have learned and correct misunderstandings without being penalized for mistakes. Practice increases retention, speed, accuracy, and performance on tests. *Doing a good job on homework is the single most important requirement for success in this course.* **It is the student's responsibility to upload their daily homework assignments into their OneNote class notebooks prior to class.** Your teacher may check and/or grade these assignments digitally. [Note: Your tutors or another teacher's work will not be accepted.]

ASSESSMENTS:

Assessments are given regularly and are announced well in advance. Assessments will contain the units being covered as well as any review material from this or *previous math courses*. An assessment missed for an illegitimate reason (such as cutting/skipping) will result in a grade of 0 and can not be taken. **Cheating on any graded activity will also result in a grade of 0.**

SPECIAL TESTS/PROJECTS:

- Mid-Term (Regents week in January)
- Cumulative Final Exam (Regents week in June)

EXTRA HELP:

Your teacher is available to help you by appointment afterschool, please ask in advance. If your teacher is trying to help several students, please be patient and wait your turn.

QUARTER GRADE AND FINAL:

Quarter Grade:

	20%	Class Participation and Homework
	80%	Assessments
Total	100%	Quarter Average

Final Average:

$$\text{For Full-Year Course} \quad \frac{1^{st} + 2^{nd} + 3^{rd} + 4^{th} + \text{Final}}{5} = \text{Final Average}$$