



JACKSON-REED HIGH SCHOOL (FORMERLY WOODROW WILSON HIGH SCHOOL)

3950 CHESAPEAKE STREET, NW - WASHINGTON, DC 20016-1855
202-282-0120 www.wilsonhs.org

“Celebrating 87 Years of Excellence”

Honors Precalculus

Instructor Math Teacher

Room #

Office
Hours

Ask your teacher!

E-mail First.last@k12.dc.gov

Course Description (Overview):

Pre-calculus extends the work with functions introduced in Algebra II by exploring their properties in greater depth and by introducing logistic and piecewise functions. Function transformations are an overarching theme which unites the various units of study. The composition of two or more functions is explored analytically and in context of real-world problem solving. Students are exposed to a deeper understanding of trigonometric functions and their inverses than in previous courses. The idea of the limit of a function is explored numerically and graphically, in preparation for calculus. Additionally, in preparation for more advanced mathematics coursework, students begin to prove *why* various properties are true, including properties of exponents and logarithms.

Course Objectives:

- Develop an understanding of the basic parent functions and transformations of those functions
- Explore properties of non-continuous and periodic functions
- Expand knowledge of polynomials and rational functions, including an emphasis on asymptotes and limits
- Deepen understanding of trigonometry, and develop a system for expanding trigonometric ratios beyond the first quadrant

Resources and Supplies:

- Graphing calculator equivalent to TI-84 or TI-83 (Texas Instruments)
- 3-ring binder (1 inch)*
- Pencils and erasers
- Box of tissues

*There will be binder checks throughout the year to ensure that students are staying organized with their materials. Binders are due by **Tuesday, September 6th**

Grading Policy:

All courses must follow the official DCPS grading scale.

- **10% Engagement** – Daily Warm-Ups, Binder Checks, Class Participation etc.
- **50% Practice and Application** - Projects, Classwork, Homework, Exit Tickets, etc.
- **40% Assessments** - Tests, Quizzes, etc.

Course Schedule:

- Unit 0: Fundamentals Review
- Unit 1: Functions
- Unit 2: Polynomials Functions
- Unit 3: Rational Functions
- Unit 4: Exponential Functions
- Unit 5: Intro to Trigonometry
- Unit 6: Analytic Trigonometry
- Unit 7: Vectors and Polar Coordinates
- Unit 8: Misc. Topics

Homework:

- Homework will generally be assigned daily, except for major test days.
- Most of the homework assignments in this class will be assigned on Delta Math and completed online
- You will be required to get a certain number of questions *correct* (not just answered) to get credit
- Students have the same number of days to make up homework as the number of days missed for an excused absence.

Late Work:

- Missing assignments are still accepted through the end of the advisory
- However, work turned in past the initial deadline (except in the case of excused absences) cannot receive a grade higher than a B (86%)
- Tests and quizzes can also be retaken to earn a higher grade, but can also not receive a grade higher than a B

Class Expectations:

- **Be Engaged**
- **Be Prepared**
- **Be Respectful**
- **Be Open-Minded**
- **Be Honest**

Attendance:

If you are absent for any reason, you need to get your notes and work caught up immediately upon return. Absence does not make you exempt. If you are absent during a review day before a test/quiz, you are still responsible for taking that assessment on time. Absent work will be available in room 418.

Cell Phones:

Cell phones must be silent and out of sight during class. The first time a phone is out during class, you will be warned. The second time you will have to place it on the teacher's desk for the remainder of the period. If this happens more than once a parent/guardian will be notified.

Student Name: _____ Signature: _____

Parent or Guardian Signature: _____