

Precalculus  
Rob Jamieson  
2020-2021 School Year  
Franklin High School

**Room:** S-244 (When we return)

**Instructor:** Rob Jamieson

**E-mail:** rjamieson@pps.net

**Remind Messenger:** Text @b78ffa to the phone number 81010 to join

**Office Location:** S-154-5 (When we return)

**Office Hours:** Upon request. See weekly schedule at the bottom for normal office hours

**Course website:** Canvas will serve as our course website this year. [pps.net/student](https://pps.net/student)

**Prerequisite:** Students enrolled in precalculus should have successfully completed (and earned credit for) Algebra 1-2, Geometry, and Advanced Algebra 3-4.

**Course Materials:**

**Textbook:** Precalculus: Concepts Through Functions. Sullivan and Sullivan. Check this textbook out from the library.

**Other Required Materials:** Notebook exclusively for math to complete homework and insert notes from class (preferably with graphing paper). Calculators are helpful in this course. Online calculators will also be used (Desmos).

**Course Description:**

Explores relations and functions graphically, numerically, symbolically, and verbally. Examines exponential, logarithmic, polynomial, and rational functions. Investigates applications from a variety of perspectives. Course explores trigonometric functions algebraically, numerically, symbolically, and graphically. Content will be explored with and without the use of a graphing calculator.

Students will be assessed on topics that are covered in the Math 111 and Math 112 course content and outcomes guidelines listed on the PCC website. They include functions, exponential functions and equations, logarithmic functions and equations, polynomial functions, rational functions, periodic functions, right triangle trigonometry, transformations of trigonometric functions, trigonometric equations, trigonometric expressions/identities, oblique triangle trigonometry, polar coordinates, vectors, and parametric equations.

**Course Topics:**

Functions, Exponential Functions and Equations, Logarithmic Functions and Equations, Polynomial Functions, Rational Functions. Trigonometric Functions, Analytic Trigonometry, Applications of Trigonometric Functions, Vectors, and Analytic Geometry.

**Course Grading:**

20% of the overall grade will be based on assignments, quizzes, and other classwork/homework problems. These items can be re-done or retaken for full credit.

80% of the overall grade will be based on tests/assessments. We will spend 15 minutes of class time revising those tests/assessments rather than full retakes of these tests. There are no retakes of tests/assessments. The final exam is considered a test. There are no retakes on the final exam. Revisions will provide students with an opportunity to get full points on that test.

**General Notes on Course:** This is an advanced math class and will be handled as such. Students are expected to have the level of background knowledge in mathematics consistent with that of their previous math courses. Previous success in math class does not always result in success in PreCalculus.

**Final proficiencies:**

**Students must demonstrate understanding of the following topics:**

**Semester 1:**

Unit 1 – Functions

Unit 2 – Polynomials and Rational Functions

Unit 3 – Exponential and Logarithmic Functions

**Semester 2: Unit 1 – Angles and Periodic Functions**

Unit 2 – Analytic Trigonometry

Unit 3 – Applications of Trigonometry

Unit 4 – Polar Coordinates and Vectors

Unit 5 – Parametric Equations

**Demonstrating understanding is generally defined as passing the individual tests with a C or better, and passing the final exam with a C or better.**

**Assessment (pre/post)/evaluation/grading policy:**

**90-100% - A**

**80-89.9% - B**

**70-79.9% - C**

**60-69.9% - D**

**0-59.9% - F**

**Feedback:** As students complete coursework, they will be given timely and specific feedback regarding their performance. *It is imperative that they stay current with the coursework so they can get feedback in time for the tests.* Students will receive this feedback through multiple forms. Comments on turned in work, auto-generated replies when using an app, peer-to-peer review, and self-diagnosis based on a teacher generated answer key will all serve students as they improve their skills.

**Homework:** With distance learning, virtually every assignment is homework. I do however provide practice problems for students to complete outside of class. I provide an answer key for these problems in the following class. It is very important for students to check their answers for accuracy and understanding. Students should model their work after mine as I demonstrate what it looks like to have correct work.

**Quizzes and Review:** I will provide students an opportunity to access documents that look very similar to a test format throughout each unit. They will complete work, take a picture of it, and submit that work via Canvas. These are opportunities to have students get their work examined by me and correct it if needed. Although most test reviews are comprehensive to that unit, students should also be reviewing any course material that was covered in that unit (or previous ones).

**Tests:** Students will take tests during the synchronous time we have during the week. Students will be permitted to work collaboratively on these tests with students who are also enrolled in my precalculus class and who are attending that day in our zoom call. Students will be sent to breakout rooms to collaborate. Students will complete the test in the allotted time that day and submit their work by the end of class by taking a picture of their hand-written work and uploading it to Canvas. If a student is absent, they can arrange a time to take a new version of that test with me. Students who miss a test will be given a zero until that test is made up. Students should make every effort to communicate about missing class and especially missing a test day to me. Students should make up tests in a timely manner (as soon as possible). In most cases, make up tests should happen within a week of when it was assigned.

**Test Corrections:** Test corrections are simply an opportunity to revisit the test and fix any mistakes they see on their test. Students will have 15 minutes to fix any errors and then have their test re-graded. This time will not be collaborative in nature and students should expect to work independently. The policy for test corrections follows the policy of testing in terms of missing class. Students should complete this in a timely manner and communicate with me regarding conflicts. Please note: 15 minutes is not a lot of time, so students should not expect to complete several problems, but simply correct any mistakes on these tests. 15 minutes is a real expectation.

**Communication:** I make every attempt to work with students who may have a special circumstance for which I have not foreseen and created policy within this syllabus. The policies you see here are a guideline and should be discussed with me if it ends up applying to you. If there are barriers that are preventing your success in this course, I want to know about them so I can help you navigate towards successful completion of this course.

**Community:** One of the best resources you can use in this class is each other. Students should study together and look to work together in class. Although I will facilitate example opportunities, I encourage you to work on study

groups on your own. The Remind App can be a great resource as well – please contact me when you need something.

**Attendance:**

**\*Attendance is taken every day (M-F).\***

- Evidence of attendance will be measured in at least one of the following ways within a 24 hour period:
  - A. Participating in a video class (live)
  - B. Communication from the student to the teacher via chat, text message, communication app, or email
  - C. A phone call between the teacher or EA/Paraprofessional with the student, or, for younger students, with the parent
  - D. Posting completed coursework to a learning management system or web-based platform or via email
  - E. Turning in complete coursework on a given day.

**Weekly Schedule:**

Time	Monday	Tuesday	Wednesday	Thursday	Friday
8:00am-9:00am	Independent work time	Independent work time	Independent work time	Independent work time	Independent work time
9:15am – 10:30am	Period 1	Period 3	Pd.1: 9:15 – 9:50am No Zoom Call	Period 1	Period 3
			Pd. 2: 9:55 – 10:30am No Zoom Call		
10:40am – 11:55am	Period 2	Period 4	Pd. 3: 10:35 – 11:10am No Zoom Call	Period 2	Period 4
			Pd. 4 11:15 – 11:50am No Zoom Call		
11:55am – 12:35pm	Lunch	Lunch	Lunch	Lunch	Lunch
12:35pm – 1:20pm	Period 3 Independent work time (Jamieson is available but a zoom call)	Period 1 Independent work time (Jamieson is available but a zoom call)	Teacher office hours (Jamieson is available for help) Until	Period 3 Independent work time (Jamieson is available but a zoom call)	Period 1 Independent work time (Jamieson is available but a zoom call)

	isn't required)	isn't required)	1:45pm	isn't required)	isn't required)
1:20pm – 1:50pm	Independent work time (Jamieson available via Remind/email)	Independent work time (Jamieson available via Remind/email)		Independent work time (Jamieson available via Remind/email)	Independent work time (Jamieson available via Remind/email)
2:00pm – 2:45pm	Period 4 Independent work time (Jamieson is available but a zoom call isn't required)	Period 2 Independent work time (Jamieson is available but a zoom call isn't required)	Independent work time	Period 4 Independent work time (Jamieson is available but a zoom call isn't required)	Period 2 Independent work time (Jamieson is available but a zoom call isn't required)
2:45pm – 3:15pm	Independent work time (Jamieson available via Remind/email)	Independent work time (Jamieson available via Remind/email)		Independent work time (Jamieson available via Remind/email)	Independent work time (Jamieson available via Remind/email)