Syllabus for Pre-Calculus 2 Spring 2026

Math 162, section 001, crn 10587
1:00 - 2:30 MW BR-08
Professor John Jernigan
215-751-8786
jjernigan@ccp.edu
`jjernigan.com`
Office: B2-25C 17th and Spring Garden
Text: Stewart, Redlin, Watson Precalculus

Your syllabus, homework assignments, practice tests and quizzes are posted on the web under the address above. Please use this resource to your benefit. You may check the quizzes *in advance* by going to the site. In addition, I will assign worksheets from the site to hand in. This will count as a quiz towards your grade.

Topics include: Exponential and logarithmic functions, trigonometric functions, identities, inverse trigonometric functions, law of sines, law of cosines, trigonometric form of complex numbers, applications.

Upon successful completion of this course, students will be able to:

1. Graph and determine properties of exponential and logarithmic functions
2. Graph and determine properties of trigonometric functions
3. Graph and determine properties of inverse trigonometric functions
4. Graph and determine properties of inverse trigonometric functions
5. Use polar coordinates to graph polar equations
6. Convert complex numbers between rectangular and polar form
7. Perform operations on vectors in the plane

There will be three tests and a final exam, as well as a short (5 question) daily quiz selected from the homework exercises. The quizzes are intended as a check on your progress, and will be part of the grade. There will be absolutely no makeup quizzes given.

Grading will be as follows: each test 20%, total quiz score 15%, final exam 25%

Grades are 90 - 100 A; 80 - 89 B, 70 - 79 C, 60 - 69 D, $<$ 60 F **It is your responsibility to keep track of how well you are doing in the class.** Keep all completed quizzes and exams in order to keep a record of your scores.

Please bring your textbook, pencil and paper to each class as we will often do problems during the class period. We will cover a significant amount of material this semester. You are encouraged to read ahead to prepare for class, as well as complete the homework assignments.

My office hours are immediately after class, 2:30 to 4:00. You can also come to the classroom early. Please do not hesitate to come to me with any class problems you are having. There is no reason for any one who works hard to do poorly in this class. You are also encouraged to use the Learning Lab.

Any student missing more than six assignments or quizzes will receive a failing grade. The subject matter of the course (transcendental functions) is difficult to master and will require your undivided attention if you are to succeed. Therefore, cell phones must be turned off and put away for the duration of the class. Anyone using a phone during class will be asked to put it away. Having to be told repeatedly (more than three times) will result in expulsion from the course. Phones, laptops, calculators, and notes are prohibited during exams. Lateness is rude and disruptive, and therefore not permitted.

Students who believe they may need an accommodation based on the impact of a disability should contact me privately to discuss their accommodation form and specific needs as soon as possible, but preferably within the first week of class. If you need to request reasonable accommodations, but do not have an accommodation form, please contact the Center on Disability, room BG-39, phone number 215-751-8050.

Course Schedule

4.1	Exponential functions
4.2	The natural exponential function
4.3	Logarithmic functions
4.4	Laws of logarithms
4.5	Exponential and logarithmic equations
4.6	Modeling with exponential functions
Exam 1	
5.1	The unit circle
5.2	Trigonometric functions
5.3	Trigonometric graphs
5.5	Inverse trigonometric functions
6.1	Angle measure
6.2	Trigonometry of right triangles
6.3	Trigonometric functions of angles
6.5	Law of sines
6.6	Law of cosines
Exam 2	
7.1	Identities
7.2	Addition and subtraction formulas
7.3	Double angle, half angle and a bunch of other formulas
7.4,7.5	Trigonometric equations
8.1	Polar coordinates
8.3	Polar form of a complex number
Exam 3	
Review and Final	

While I am aware that most students take math courses only when required to do so, I sincerely hope that this course will not only be stress free, but also enjoyable and instructive. Much of this depends on you. Please ask questions, give your opinion, and participate!