Syllabus for Pre-Calculus 2 Spring 2023

Math 162 Section 001 CRN 10587
1:00 - 2:30 pm MW Bonnell Building BR-08
Professor John Jernigan
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Office: B2-25C 17th and Spring Garden
Text: Stewart, Redlin, Watson Precalculus

Homework and weekly quizzes are done in WebAssign, 3 Tests and the Final Exam are in class Step one is to make a WebAssign account in Canvas.

This is not a self paced class. You have three assignments due per week: a homework due Tuesday, a homework due Friday, and an Exam due Sunday. All assignments are due by 11:59 pm, and may not be taken after that time. You may spend as much time as you like on the homework, using the on line help and hints. You need not complete it in one sitting. However, the exams are 90 minutes and may not be taken more than once. Of course you are free to complete any assignment and exam before the due date and time, and are encouraged to do so. Grades are calculated as 10% homework, 25% weekly exams, 15% for each Test, 20% final

Canvas is your course syllabus. The weekly topics can be found in the modules in Canvas.

1. Each week there are two homework assignments and one Exam.
2. The first assignment is due by 11:59 p.m. on Tuesday, the second by 11:59 p.m Friday. Week 1 is an exception, there is only one homework due Friday. It longer than usual and is all review.
3. You may spend as much time as you like on the homework, using the hints and the on line help.
4. Exams are due Sunday by 11:59 p.m.
5. The weekly exam is approximately 12 questions, timed at 90 minutes, and may not be taken more than once. Please do not open the exam until you are ready to take it.
6. Anyone missing 6 or more assignments will automatically fail the course irrespective of grade. There are no exceptions to this policy.

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. Solve problems using trigonometric identities
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

It is your responsibility to keep track of how well you are doing in the class. You can access your current grade from WebAssign

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.

Students must be familiar with and adhere to the college policy on academic honesty

Course Schedule

Week 1	
4.1	Exponential functions
Week 2	
4.2	The natural exponential function
4.3	Logarithmic functions
Week 3	
4.4	Laws of logarithms
4.5	Exponential and logarithmic equations
Week 4	
4.6	Modeling with exponential functions
5.1	The unit circle
Week 5	
5.2	Trigonometric functions
5.3	Trigonometric graphs
Week 6	
5.4	More Trigonometric Graphs
5.5	Inverse trigonometric functions
6.1	Angle measure
Week 7	
6.2	Trigonometry of right triangles
6.3	Trigonometric functions of angles
Week 8	
6.4	Inverse Trigonometric Functions
6.5	Law of Sines
Week 9	
6.6	Law of Cosines
7.1	Identities
Week 10	
7.2	Addition and subtraction formulas
7.3	Double angle, half angle and a bunch of other formulas
Week 11	
7.4	Basic Trigonometric Equations
7.5	More Trigonometric equations
Week 12	
8.1	Polar coordinates
Week 13	
8.3	Polar form of a complex number
Week 14	
8.3	Polar form of a complex number, Powers and roots.
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!