

Syllabus for Pre-Calculus 1 Spring 2020

Math 161, crn 10584

12:40 - 1:40 MWF BR-8

Professor John Jernigan

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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: Functions and relations and their graphs, transformations and symmetries; composition of functions; one-to-one functions and their inverses; polynomial functions; complex numbers; rational functions; conic sections.

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

1. Determine basic properties of functions
2. Perform operations on functions
3. Graph polynomial and rational functions
4. Perform operations on complex numbers
5. Find real and complex roots of quadratic functions
6. Graph transformations of functions
7. Graph and determine properties of conic sections

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: the total quiz score counts as one test and the final counts as two. Thus the formula for grading will be

$$\left(\frac{\text{test 1} + \text{test 2} + \text{test 3} + \text{total quiz score} + 2 \times \text{final}}{6} \right)$$

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 Monday Wednesday Friday 2:00 - 4:00. If these times are not suitable you are welcome to make an appointment. 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 You can find help on the Main campus in the Learning Lab in room B2-36 weekdays and in room B1-28 Monday through Thursday evenings. Free, peer tutoring is available beginning with the second week of classes for all current CCP students. Free, weekly workshops, which begin in the third week of classes, are also available to all CCP students. For more information, go to <https://www.mycpp.online/learning-labs-student-academic-computer-center/tutoring>

It is the policy of CCP that no more than six (6) absences are allowed during the course of the semester. Any student missing more than six classes, for any reason, will be automatically dropped from the class. Cell phones must be turned off and put away during class. Lateness is rude and disruptive, and therefore not permitted.

In the unlikely event that, due to an emergency, you cannot make it to a scheduled exam, you must contact me within 24 hours by email. Written documented proof is required for excused absences. Otherwise missing an exam will result in a 0. Students must be familiar with and adhere to the college's policy on academic honesty, which can be found at <https://www.mycpp.online/college-policies-and-procedures/academic-integrity>

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.

In the event of inclement weather check <http://www.ccp.edu/> for school closing.

Every classroom has a poster with instructions on how to evacuate the room in an emergency. The poster shows how to go to the nearest exits, and where the nearest rescue area is located. You should read this poster carefully so you will know what to do in the event of an emergency evacuation. Also, if you need assistance to leave the building, you should let your instructor know. Someone will help you get to the nearest rescue area.

Course Schedule

1.2	Exponents and radicals
1.3	Algebraic expressions
1.4	Rational expressions
1.5	Equations
1.8	Inequalities
1.9	Coordinate plane, Circles
1.10	Lines

Exam 1

2.1	Functions
2.2	Graphs of functions
2.5	Linear Functions
2.6	Transformation of functions
2.7	Combining functions
2.8	One to one functions and inverse functions
3.1	Quadratic functions

Exam 2

3.2	Polynomial functions and graphs
3.3	Dividing polynomials
3.4,3.5	Zeros of polynomials
3.6	Rational functions
11	Conic Sections

Exam 3

Review and Final

Important dates:

01/20	College Closed MLK
03/2-7	College Closed Spring Break
04/6	Last Day to Drop
04/20	Last Day of Class

The Academic Calendar can be found at <https://ccp.edu/college-catalog/academic-calendar>

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!