

SYLLABUS

Instructor: Dr. Yun Yoo

Course Number: Math 161 **CRN:** 11996 **Section:** 009

Class Time: Sat 12:30 pm – 3:35 pm

Classroom: BR-11

E-mail: yyoo@ccp.edu (The best way contact me)

Office: B1-9D

Phone: 215-751-8317

Office Hours: Sat: 8:00 am- 9:00 am and 3:40 am-5:00 pm at B1-9D
Fri: 3:40 pm -5:00 pm at West Campus or an appointment

Text: **Precalculus Vol I, Custom Edition, Math 161, Community College of Philadelphia, 7/E by Stewart, Redlin, Watson**

Course Description: 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.

Calculator: **You are NOT allowed to use calculator when you take tests.**

Student Outcomes: Student 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

Prerequisites: MATH 118 with a grade of "C" or better.

Homework: It is especially important that you keep up with the homework. We will discuss some of these problems in class, and I will be glad to help you outside class as well, but it is your responsibility to do the work. **Homework will be assigned, but it will not be collected.**
DO NOT ALLOW YOURSELF TO FALL BEHIND, AND SEEK HELP IF YOU ARE HAVING DIFFICULTY.

Attendance: **Attendance will be taken at each class by means of an “Attendance Quiz” These are for practice and fun. I will give**

you solutions of each AQ at the end of class so that you shouldn't ask me solutions before taking exam. There is a college policy allowing at most 2 absences (for Sat classes) during the semester. In the event that you do not meet this policy, you may be dropped from the class. Regular attendance is necessary in order to master the material. It is your responsibility to find out what you have missed due to absence. It is important that you try to do the work you have missed.

Test: There will be 3 tests and a comprehensive final exam.

Makeup Policy: Make-ups are the discretion of the instructor and require prior approval and a written, acceptable medical excuse.
Everyone must take the Comprehensive Final Exam. If not, you will get "F". NOTE: **No test grade will be dropped.**

Help

There are several resources for students with questions. First and foremost, you should participate and ask questions in class. If you still have unanswered questions, please feel free to stop by my office during the office hours. More importantly, **CCP provides free tutoring and workshops in Room B2-36 (South Learning Lab) for daytime and Room B1-28 (Central Learning Lab) for evening time.** Many students find it helpful to form study groups for doing homework and studying for tests. It is a great way to learn materials.

Grading: The course average will be computed using **the average of the three tests (75%) and the final (25%).** Your written final grade will be determined as follow:

90-100 %	A
80-89 %	B
70-79 %	C
60-69 %	D
0-59 %	F

Inclement weather: In the event of inclement weather there are several ways of determining whether CCP is open. You may listen for CCP's school closing number 238 (for day classes) and 2238 (for evening classes) on KYW radio at 1060 on the AM dial or check KYW's school closing web page at <http://www2.kyw1060.com/schools/> or for a price you may call KYW's school closing phone number at 1-900-737-1060.

Final Remarks:

- **Avoid any behavior that can be disturbing to the class.**

- Turn off pagers, mobile phones, and iPod
- Be respectful to me and to your classmates.
- No food or gum during class.
- If you need to leave the classroom early, do it as quietly as possible.

Lecture Schedules

**Text: Precalculus 1, Custom Edition, Math 161, Community College of Philadelphia,
7/E by Stewart, Redlin, Watson**

Week #1 (Jan 23)	Sat	1.1 Real Numbers 1.2 Exponents and Radicals 1.3 Algebraic Expressions
Week #2 (Jan 30)	Sat	1.4 Rational Expressions 1.5 Equations
Week #3 (Feb 6)	Sat	1.6 Inequality 1.8 Coordinate Geometry 1.10 Lines
Week #4 (Feb 13)	Sat	Test 1 2.1 What is a function? 2.2 Graphs of Functions
Week #5 (Feb 20)	Sat	2.4 Transformations of Functions 2.5 Quadratic Functions; Maxima and minima
Week #6 (Feb 27)	Sat	2.7 Combining Functions 2.8 One-to-one functions and their inverses 3.1 Polynomial Functions and their graphs

Week #7 (March 5)	Sat	3.2 Dividing Polynomials Catch up materials
	Spring Break: College Closed, March 7-12	
Week #8 (March 19)	Sat	Test 2 3.3 Real Zero Polynomials
Week #9 (March 26)	Sat	3.4 Complex numbers 3.5 Complex zero and the fundamental theorem of algebra
Week #10 (April 2)	Sat	3.6 Rational Functions
Week #11 (April 9)	Sat	10.1 Parabola Catch up materials
Week #12 (April 16)	Sat	Test 3 10.2 Ellipses
Week #13 (April 23)	Sat	Final Review
Week #15 (April 29-May 5)	Comprehensive Final Exam	