

Montgomery County Community College
MAT 161
Precalculus I
4-4-0

COURSE DESCRIPTION:

A comprehensive precalculus course which extends the material taught in MAT 100. Additional topics include: quadratic and absolute value, inequalities, binomial theorem, sigma notation, conic sections, theory of equations and complex numbers. A graphing calculator is required for class, homework, and testing. Classroom instruction will be presented using a TI-84 Plus.

REQUISITE(S):

Previous Course Requirements

- * MAT 100 Intermediate Algebra with a minimum grade of "C"

Concurrent Course Requirements

None

COURSE COMMENTS

- * Quantitative Reasoning, Algebra, and Statistic 792 reW* nB

23. Graphs of Rational Functions
24. Circles and Parabolas
25. Ellipses; Hyperbolas
26. Sequences and Series
27. The Binomial Theorem
28. Solving Systems of Equations
29. Systems of Linear Equations in Two Variables
30. Multivariate Linear Systems
31. The Inverse of a Square Matrix (with calculator)

LEARNING MATERIALS:

Textbook:

Larson. (2017). *Precalculus: Real Mathematics, Real People* (7th ed.). Cengage.

Required Materials:

TI-84+ Graphing Calculator. If a student has a TI-83+, they do not need to buy a TI-84+.

Other learning