



# **MATH 103 - College Algebra**

4 credits

Instructor: Tracy Chisholm

**Course Description:** This course covers the following topics:

- Linear and Quadratic Equations
- Radicals
- Exponents and Logarithms
- Rational Expressions
- Systems of Linear Equations
- Functional Notation
- Graphing Functions

**Prerequisite:** MATH 102 Intermediate Algebra, ASC 93 Algebra Prep III, placement by math placement test or instructor approval.

**Course Objectives:** The student will be introduced to the topics above which require certain techniques for solutions. We will develop ideas and methods for applying these techniques leading to a solution or resolution of the question. During the course the student will be exposed to the use and application of the graphics calculator in the appropriate areas.

**Class Schedule:** MTWF 9-9:50am

Monday	Tuesday	Wednesday	Thursday	Friday
NSC 124	NSC 124	NSC 124		NSC 124
9-9:50am	9-9:50am	9-9:50am		9-9:50am

**Instructor:** Tracy Chisholm

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Office Hours: Mon-Fri 3-4pm and Thursday 2-4pm or by appointment

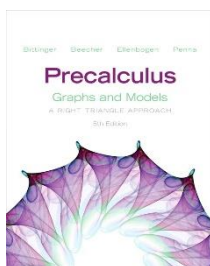
### Tentative Course Outline:

<b>Chapter</b>	<b>Topics</b>	<b>Dates</b>
Chapter R Sections R.1-R.8	Basic Concepts of Algebra	Weeks 1-3
Chapter 1 Sections 1.1-1.6	Graphs, Functions, and Models	Weeks 4-6
Chapter 9 Sections 9.1 & 9.3	Systems of Equations & Inequalities	Week 6
Chapter 2 Sections 2.1-2.6	More on Functions	Weeks 7-8
Chapter 3 Sections 3.1-3.5	Quadratic Functions and Equations; Inequalities	Weeks 9-12
Chapter 4 Sections 4.1-4.6	Polynomial Functions and Rational Functions	Weeks 12-13
Chapter 5 Sections 5.1-5.6	Exponential Functions and Logarithmic Functions	Weeks 14-16
Final Exam		Finals Week

\*\*\*\*The final exam must be taken during the designated time according the finals week schedule.\*\*\*\*

**My final is:** \_\_\_\_\_.

**Required Text:** *Precalculus Graphs and Models 5<sup>th</sup> Edition* by Bittinger, Beecher, Ellenbogen and Penna with MyMathLab online learning software. Pearson Publishing.



MyMathLab Learning Software Website: [www.mymathlab.com](http://www.mymathlab.com)

## Course Requirements:

The sequential nature of mathematics deems it necessary for students to attend class on a regular basis, therefore one of the course requirements is regular attendance. Learning algebra is an investment of time. Algebra is learned best by practice, reflect, and practice some more. Understanding the examples provided by the instructor and textbook is a good first step. However, to truly know the material, you should be able to look at a problem, know how to proceed, and carry out the steps **WITHOUT ASSISTANCE**. The independent practice and graded homework provide opportunities for you to get to that point. Passing grades on quizzes and tests demonstrate that you have indeed learned the skills taught.

**Homework Assignments:** These are graded assignments that can be done multiple times. Only the highest score will be used. These assignments close at 11:59 PM, Central Daylight Time on the night before the corresponding chapter test. Do the work well in advance. If the assignment is done after the posted due date, 30% will be deducted from your score.

**Quizzes:** Quizzes will be given periodically. These may be announced or unannounced. Only announced quizzes can be made up. You will be deducted 10% for each day it is late up to two days. You cannot make it up after that point.

**Tests:** Six graded tests are administered over the semester. Students are allowed one attempt on each test. Tests must be taken on the day they are given or previous arrangements must be made prior to the test day. If arrangements are not made and you miss a test, you will receive a 0.



A = 90-100%

B = 80-89%

C = 70-79%

D = 60-69%

**General Education Goals/Objectives:**

- Goal 2: Demonstrates knowledge and application of technology.
  - Objective 2: Uses electronic resources for course related assignments and information
    - Skill 1: Selects appropriate program on the graphing calculator to solve problems
- Goal 3: Demonstrates the ability to convert, calculate, and analyze a variety of mathematical problems
  - Objective 1: Utilizes mathematical equations to solve problems
    - Skill1: Solves equations and problems using the appropriate method
  - Objective 2: Applies practical application of mathematics to everyday life
    - Skill3: Solves word problems

**Relationship to Campus Theme:** The student will use the graphing calculator to model application problems in nature, economics, science, psychology, etc. Communication with others will be emphasized.

**Classroom Policies:** Please refrain from any behavior that would disrupt the class. Cell phones can only be used in emergency situations and they must be turned to vibrate. The academic environment is an open and harassment free environment. Participation is encouraged.

- Regular participation is expected.
- Learning activities and evaluation will occur in the MyMathLab learning system and requires Internet connectivity.

**Academic Integrity:** The academic community is operated on the basis of honesty, integrity and fair play. It is the expectation that all students, as members of the college community, adhere to the highest levels of academic integrity. This means that:

- Students are responsible for submitting their own work. Student work must not be plagiarized.
- Students must not cooperate on oral or written examinations or work together on evaluated assignments without authorization.
- If there is evidence of cheating on an exam the student will receive an F on the respective exam.

**Disabilities and Special Needs:** If you have a disability for which you need accommodation, contact the Learning Center to request disability support services: phone 701-228-5477 or toll-free 1-888-918-5623.