



# **MATH 102 – Intermediate Algebra**

4 credits

Instructor: Tracy Chisholm

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

- Properties of the Real Number System
- Factoring
- Solving Linear Equations
- Quadratic Equations
- Inequalities
- Polynomials
- Rational Expressions and Equations

**Prerequisite:** ASC 92 Beginning Algebra, placement by math placement test or instructor approval.

**Course Objectives:** It is expected that students will be able to:

- Perform basic algebraic operations using positive and negative numbers, fractions, and exponents. Demonstrate an understanding of terms and rules used in algebra.
- Utilize problem-solving strategies to solve problems.
- Simplify expressions & solve equations and inequalities.
- Factor using greatest common factor, factor by grouping, and factor trinomials.
- Plot points, graph linear equations, and find slope of a line.
- Analyze and solve various types of math problems
- Utilize a hand-held calculator when solving algebra problems
- Gain the skills needed to participate in a college algebra course

**Class Schedule:** online

**Instructor:** Tracy Chisholm

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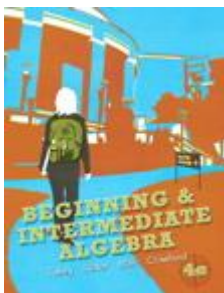
*Office Hours:* Students are welcome to visit me in my office at any time outside of class. I do not have designated office hours as this is the only class I teach on campus.

**Tentative Course Outline:**

This schedule is designed to give you an idea of where you should be in the course. All of the homework assignments and quizzes are open through the end of the semester, but this timeline will help keep you on track to complete all of the material in the course.

<b>Chapter</b>	<b>Topics</b>	<b>Dates</b>
Chapter 3 Sections 3.1 – 3.6	Graphing & Functions	Weeks 1-2
Chapter 4 Sections 4.1 & 4.3	Systems of Linear Equations & Inequalities	Week 2
Chapter 6 Sections 6.1 – 6.7	Factoring	Week 3-4
Chapter 7 Sections 7.1 – 7.6	Rational Expressions and Equations	Week 4-5
Chapter 8 Sections 8.1 – 8.5	Rational Exponents and Radicals	Week 6-7
Final Exam		Week 8

**Required Text:** *Beginning & Intermediate Algebra 4th Edition* by Tobey, Slater, Blair and Crawford with MyMathLab online learning software Pearson Publishing



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

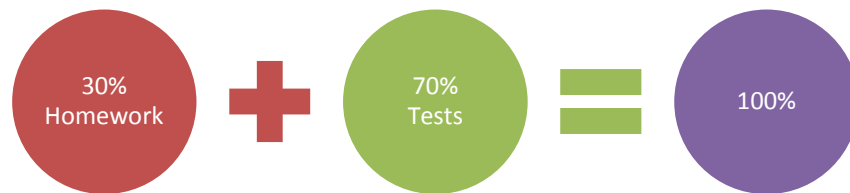
### Course Requirements:

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:** Graded assignments are found in MyMathLab. These assignments can be done multiple times and the best scores will be used. Grades of 75% or higher are required to proceed to the subsequent homework assignment. Homework constitutes 30% of the student's final grade.

**Tests:** Only two exams will be given: the mid-term exam and the final exam. These exams must be taken in the presence of an approved proctor. Students to need submit a completed proctor

form at least 2 weeks prior to the first exam. The pre-assessment test is not calculated into the final grade. Tests constitute 70% of the student's final grade. Students are allowed one attempt on each test. It is the student's responsibility to take the tests on the dates they are available.



This course is graded as pass/fail. Students need a 70% final grade to pass this course.

### **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:** This course develops algebra skills that are used to solve problems in science, technology, business, and social sciences.

### **Classroom Policies:**

- Regular participation is expected.
- Learning activities and evaluation will occur in the MyMathLab learning system and requires Internet connectivity. Students need to set up or select an environment conducive to study and testing.
- Tests will be available for a limited period of time. Students should complete the tests without the use of notes or other materials.

**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.