# **MATH 1010**

# PRE-INTERMEDIATE ALGEBRA

## **PART 11**

#### **Course Description:**

This course is designed to prepare students who have passed MATH 1000, Pre-Intermediate Algebra, with a C- or better, to be successful in MATH 1220, College Algebra. It will serve as a one credit bridge course and will be offered for a maximum of two years. **Credit earned in MATH 1010 will not count towards the 120 hour degree requirement. 1 credit** 

#### **Prerequisites:**

UNO's MATH 1000 taken within the last two years with a grade of C- or better. The last semester MATH 1010 will be offered will be spring of 2020.

#### **Major Topics:**

## 1) Graphs and Functions

- a. The Rectangular Coordinate System and Graphing
- b. Relations and Functions: Notation and Graphing
- c. Graphing Linear Equations and Inequalities in Two Variables

#### 2) Systems of Linear Equations in Two Variables

- a. Solving Systems of Linear Equations in Two and Three Variables
- b. Applications of Systems of Linear Equations

#### 3) Polynomial Expressions and Functions

- a. Rules of Exponents
- b. Operations on Polynomials and Polynomial Functions

#### 4) Factoring and Solving Polynomial Equations

- a. Greatest Common Factor
- b. Factoring by Grouping
- c. Factoring Trinomials
- d. Special Cases and General Strategy
- e. Zero-Product Property and Solving Polynomial Equations
- f. Applications of Polynomial Equations

# **Methods**:

Class meets once a week for 50 minutes. In class, the teacher will cover important concepts, work especially difficult problems, and guide students through the work that will be done each week. The teacher will discuss study strategies and help students to avoid common errors. Typically, this class time will be separated into lecture time and time for doing homework, and taking computer assisted quizzes and tests. Students are responsible for 1 flexible hour in the Math Lab per week, with Teaching Assistants, using Math Lab software. All homework, quizzes, tests, and a cumulative final exam will be done on the UNO MyMathLab software.

#### **Student Role:**

Students will be expected to attend weekly classes, participate in class, do all homework, quizzes, and tests. Students are responsible each week for 1 flexible hour in the Math Lab working with Teaching Assistants doing homework, quizzes, and tests.

### **Textbook:**

Algebra Class Notes (Packaged with MYMATHLAB Plus Access), Trigstad Packaging

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