

Welcome to College Prep Algebra with Mr. Dulaney. This class is split into two semesters, with each semester consisting of a college level Algebra class. You must get a C or higher on **both** semesters, in order to exempt out of the math placement test. See attached pages for topics we will be covering.

**Materials Needed (Daily):**

Pencil, Folder / Binder (for keeping notes / activities), Calculator

**Grading**

**Homework / Classroom Activities / Small Projects:**

Homework which involves computation practice will be given after each lesson. This will usually consist of 20 problems. Sometimes, this will be collected and graded the following day (announced in advanced). Other times, a short homework quiz will be given, with the problems as practice. In this case, each student is to complete enough of the questions to be comfortable with the topic, as many or few as that is. Homework practice will NOT be collected. **Instead, a 3-5 question quiz will be given the day after the assignment, with questions selected randomly from the assignment.**

**Cumulative Quizzes** will be given after smaller units of study. These will almost always be announced in advance, and include Notes quizzes.

**Exams** are given with each unit of study. Larger chapters may be broken down into smaller units, with an exam for each.

**Participation / Bell Ringers:** At the start of class when you enter, there will be a problem on the board (if not doing a homework quiz that day). You will write the problem down, any work needed to solve it, and the answer.

**Semester Exams:** Final Exams are provided by the college, and are cumulative (usually around 20 questions).

## **Classroom Procedures**

**Start of the Hour:** Students should be in their seat at the bell, ready to begin classwork. **Homework MUST be turned in to the appropriate basket before class (teaching) starts. Turn it in when you get in the room, if it's being collected that day.** All needed materials must be brought to class, as trips back to your locker will not be permitted after the bell.

### **Late Work / Missing Assignments**

- Handbook policy applies for an excused absence.
- Late work **MAY** be accepted after this time, for no more than half credit. **NO late work will be accepted within the last week of the grading period, except for excused absences.**
- **Students are responsible** for getting any missing assignments / notes, as well as scheduling times to make up any missed quizzes / exams. To find out what you missed, you can check the boards on the side wall, Mr. Dulaney's website (<https://mathwithmrdulaney.com>) , or ask a classmate.
- For copies of missed printed notes / assignments, see <https://mathwithmrdulaney.com> . (anything hand-written, you are responsible for borrowing and re-writing from a classmate).

### **Calculator Policy**

- Calculators are found at each spot on the desks. They may NOT leave the classroom, and students are responsible to any damage, defacing, or loss of calculator caused by misuse. **Cell phones may NOT be used for a calculator in the classroom, for any reason.**

### **Classroom Policies**

- No food / drink. Water in clear plastic bottles only will be allowed.
- No backpacks (drawstrings are ok, if they fit under the desk).
- Passes are given on an emergency basis only, and none will be given during the first or last 10 minutes of the class. No passes will be given for forgotten books / calculators / work.
- Respect each other. All handbook policies apply.
- Referrals will be written for repeated offenses or gross misconduct.

### **Cell Phone Policy**

Cell phones may not out for any reason, without prior approval from Mr. Dulaney. They **must** be turned to silent or off, and out of sight (pocket, bag, etc).

The exception to this is if you wish to charge your phone at Mr. Dulaney's charging station. Procedures for this will be discussed on the first day of class. Once your phone is on the charging station, you may not remove it until the end of class.

You will **occasionally** be permitted (upon asking) to listen to music on your phone, once all work is completed, and permission is granted. To do so, you must have headphones in, and you may not be on the phone itself (start a playlist, and put it away). Fiddling with the phone (texting, games, etc) while listening to music will be treated in the same way as phone use without permission.

**1<sup>st</sup> Offence:** Phone is turned off and placed in a self-sealing envelope with your name on it, and given to you. The envelope must stay visible on the desk and unopened until the end of the hour.

**2<sup>nd</sup>+ Offence (per quarter):** Same as 1<sup>st</sup>, except the phone is turned into the office, and you may pick it up at the end of the day. Parent is called.

**Refusal on of the above will result in an automatic referral.**

Math 112 Working Syllabus

*Intermediate Algebra for College Students* by Bernard Kohlman & Arnold Shapiro, 5<sup>th</sup> edition

**\*Chapter 1 – The Real Number System**

- 1.1 The Real Number System
- 1.2 Arithmetic Operations: Fractions
- 1.3 Algebraic Expressions
- 1.4 Operating with Signed Numbers; Exponents
- 1.5 Properties of the Real Numbers
- 1.6 Absolute Value and Inequalities

**Chapter 2 – Linear Equations and Inequalities**

- 2.1 Linear Equations in One Variable
- 2.2 Problem Solving: From Words to Algebra
- 2.3 Formulas
- 2.4 Linear Inequalities

**Chapter 3 – Mathematical Models and Word Problems**

- 3.1 Coin Problems
- 3.2 Investment Problems
- 3.3 Distance (Uniform Motion) Problems
- 3.4 Mixture Problems

**Chapter 4 – Polynomials**

- 4.1 Polynomials
- 4.2 Addition and Subtraction of Polynomials
- 4.3 Multiplication of Polynomials
- 4.6 Division of Polynomials (only required topic is division by monomials)

**Chapter 6 – Functions**

- 6.1 Rectangular Coordinate System
- 6.2 Functions and Function Notation

**Chapter 7 – The Straight Line**

- 7.1 Slope of the Straight Line
- 7.2 Equations of the Straight Line
- 7.3 Further Properties of the Straight Line

**Chapter 8 – Exponents, Radicals, and Complex Numbers**

- 8.1 Positive Integer Exponents
- 8.2 Integer Exponents

**Chapter 13 – Systems of Equations and Inequalities**

- 13.1 Systems of Equations
- 13.2 Solving by Elimination
- 13.3 Applications

\*Students should already know much of the material covered in Chapter 1. However, they may need some review. Instructors should use discretion on how much time to devote to this chapter.

**Students are required to have a graphing calculator for this course.** Any of the TI-83 or TI-84 models are recommended.

Math 116 Working Syllabus  
*Intermediate Algebra for College Students* by Bernard Kohlman & Arnold Shapiro, 5<sup>th</sup> edition

**Chapter 2 – Linear Equations and Inequalities**

2.5 Absolute Value in Equations and Inequalities  
(only required topic is absolute value equations)

**Chapter 4 – Polynomials**

4.4 Factoring  
4.5 Special Factors

**Chapter 5 – Rational Expressions**

5.1 Simplifying Rational Expressions  
5.2 Multiplication and Division of Rational Expressions  
5.3 Additional and Subtraction of Rational Expressions  
5.5 Equations and Inequalities with Fractions  
5.6 Applications; Work Problems  
5.7 Ratio and Proportion

**Chapter 6 – Functions**

6.3 Graphs of Functions (only required topics are linear and quadratic functions)

**Chapter 8 – Exponents, Radicals, and Complex Numbers**

8.3 Rational Exponents and Radicals  
8.4 Evaluating and Simplifying Radicals  
8.5 Operations with Radicals  
8.6 *Complex Numbers (optional)*

**Chapter 9 – Second-Degree Equations and Inequalities**

9.1 Solving Quadratic Equations  
9.2 The Quadratic Formula  
9.3 Roots of a Quadratic Equation: The Discriminant  
9.4 Applications of Quadratic Equations  
9.5 Forms Leading to Quadratics

Note: The above sections are listed in numerical order, but do not have to be covered in this order. Teacher discretion in rearranging sections is encouraged!

**Students are required to have a graphing calculator for this course.** Any of the TI-83 or TI-84 models are recommended.