LEARNING UNLIMITED PREPARATORY SCHOOL

**ALGEBRA II 2022 - 23 SYLLABUS**

**Science Lab**

**Welcome Back!** **Welcome to Ms. Sarah’s High School Algebra II Class.** Hope you had a wonderful holiday and are set to begin another year of challenges and stimulation! As lifelong learners of the global world, I invite you think positively about mathematics and learn to be a “doer” of math! I may not always have all the answers, but it is my hope that we will learn collaboratively and have fun discovering the answers together! Let us challenge each other to become the best of our potential selves!

**Course Description:** This course is designed to build on algebraic (and geometric) concepts.  It develops advanced algebra skills such as systems of equations, advanced polynomials, imaginary and complex numbers, quadratics, transformations of functions, and includes the study of trigonometric functions.  It also introduces matrices and their properties.  The content of this course are important for students’ success on the SAT, ACT and college mathematics entrance exams.  Students who complete Algebra II should take Pre-Calculus next.

**Course Textbook:** This year we will be using Glencoe McGraw-Hill’s *Algebra II,* 2012 [ISBN: 978-0-07-895265-4]. We will supplement the course with SAT preparatory materials, engaging in a weekly review of essential skills. We may use additional resources as appropriate.

Using the textbook as the foundation for learning, we will engage in individual assignments, group activities, interactive activities, and projects. We will cover a breadth of material. Effort will be made to incorporate current events in mathematics, as well as apply mathematical knowledge and technology. Listed below are the major units to be covered in the time frame provided:

**SEMESTER 1** **SEMESTER 2**

Unit 1: Linear Relations & Functions (Ch 1 - 3) Unit 3: Advanced Functions & Relations (Ch 7 - 9) Unit 2: Quadratic, Polynomial, & Radical Functions Unit 4: Trigonometry (Ch 12 - 13)

& Relations (Ch 4 - 6) Unit 5: Discrete Mathematics (Ch 10 - 11)

**Course Overview:** Throughout the year, you will be exposed to experiences, activities and information that will both challenge and stimulate the mathematical side of your academic learning. Concurrently, while encouraging you to be a lifelong learner, I will be facilitating your development of various life skills, especially those associated with communications, problem-solving, critical thinking, collaboration, and citizenship.

Success in Algebra II requires understanding from both a conceptual and practical approach. Knowledge and mastery of skills required for high school level Algebra II will be enhanced via PBL. PBL focuses both on project- and problem-based learning. All these learning experiences will lend themselves well as representative work for **Student-Led Conferences (SLCs).**

**Course Policies & Procedures:**  Your success in this class is dependent upon your willingness and motivation to work and learn beyond the allotted class time.

* Set aside at least **30 minutes** every night to read sections of the textbook AND to review material covered/discussed in class. DO YOUR HOMEWORK INDIVIDUALLY AND SUBMIT IN A TIMELY FASHION!!!
* Throughout the year, you will be expected to write research reports and utilize various reference sources. You will be expected to cite your references accordingly or be penalized with a failing grade for the assignment.
* Group work is expected. Please remember to work collaboratively and harmoniously!
* Assignments, projects, lab reports, etc. are expected to be turned in as per deadline date AND time. After 1-day post-deadline date, late assignments WILL NOT BE ACCEPTED*.* An assignment submitted a day after the expected due date will be subject to a 30% penalty. To better prepare you for college life, **LATE WORK IS PROHIBITED**! *If extenuating circumstances should arise, it is YOUR responsibility to communicate with the teacher prior to deadline date(s).*
* Please prepare for weekly quizzes, especially those associated with chapter vocabulary. **Review daily** and be prepared for Section Review “pop quizzes”. Learning, remembering, and utilizing the proper scientific terminology is crucial for basic success in the course.
* Those absent (unexcused) during the day of a quiz/exam will not be permitted to “make it up”. If the absence is excused, you are responsible for arranging to write the quiz/exam within one week of the absence; failure to do so, results in a score of “F”.

Students are responsible for their own academic success. **This means a student who misses a class period for any reason is responsible for determining the day’s assignment and completing the requisite work.**

**Supplies & Materials:** You are expected to provide your own supplies, unless otherwise provided by the teacher. You are solely responsible for acquiring and maintaining these items: personal notebook (graphing)/folder; USB flash drive, dry erase markers, scientific calculator, graphing calculator (optional).

Each day’s lessons and major assignments/projects will be available digitally and can be found at **msbeland.weebly.com**.

Assignments will be submitted via the appropriate category in Ms. Beland’s ALGEBRA II Google Classroom.

On certain days, you will be expected to bring your laptop/tablet for the day’s activity. You will be forewarned of these specific days. **Textbook MUST be brought DAILY!!**

\*\*\*Contents of this syllabus, course policies and procedures are subject to change, by the teacher, with prior notice to students before implementation.

**REMEMBER: CHEATING AND PLAGIARISM ARE PROHIBITED!!**

 **NO FOOD OR BEVERAGES IN THE CLASSROOM!**

**Grading Distribution:** Your grades will reflect a weighting distribution according to the following categories:

 ASSIGNMENTS [Homework/Participation/Class Work/Projects/Labs] = 10% ASSESSMENTS [Quizzes/Tests] = 90%

**Grading Scheme: A** = 90 -100% **B** = 80 – 89% **C** = 70 – 79% **D** = 65 – 69% **F** = <65%

**Quarter 1**: 20 % **Quarter 2**: 20% **Mid-Term Exam:** 10% **Quarter 3:** 20% **Quarter 4:** 20% **Final Exam:** 10%

**School Policies & Procedures:** Please refer to the Student Parent Handbook located online (*http://www.luschool.com/student-parent-handbook.html*) for further information regarding school-wide policies and procedures.

**Contact:** Daily lessons can be viewed on: **msbeland.weebly.com**. You may address any further concerns, deliver assignments, projects, lab reports, etc. to the following email address: sbeland@luschool.com. If you desire immediate feedback/response, please send me a **Google Chat**.

**\*\* Math gives us hope that every problem has a solution!\*\***