



MYP Mathematics Pre-AP Algebra 2

2017-2018 Course Syllabus

Instructor: Marlene Nobles

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Conference Period – 1st

Phone: 940-369-2149

Tutorials: Mornings 8:15 – 8:45

Wednesday 4:15-4:45



COURSE DESCRIPTION:

This course will cover the topics in the TEKS so that students will learn to solve problems that exist in the real world using Algebra. We will study Foundations of Functions, Linear Functions, Quadratic Functions, Matrices, Inverse Functions, Square Root Functions, Polynomials, Exponential Functions, Logarithmic Functions, Conic Sections, and Sequences and Series. This is a Pre-AP course designed to prepare students for their future Pre-AP and AP math classes. In addition, the instruction for this class will incorporate strategies from the International Baccalaureate program. Students will continue to aspire to reflect those characteristics of the IB Learner Profile. As a result of the high standards, success in this class will depend on the motivation of the student. Students MUST keep up with their assignments, ask questions, follow directions, and take advantage of tutoring when necessary to guarantee success. Math is not a spectator sport!

TEXTBOOK: SpringBoard: Algebra 2

The mathematics **TEKS** describe what a child should know and be able to do. You may view the TEKS at <http://ritter.tea.state.tx.us/rules/tac/chapter111/ch111c.html>

SUPPLIES NEEDED:

BRING DAILY

- Loose-leaf notebook paper & 3-ring binder
- Graph paper
- Pencils for homework
- Red pens for homework grading
- Highlighter

BRING ONCE

- Four AAA Batteries for graphing calculators (to be left in class)
- Box of tissues or hand sanitizer

MYP MISSION STATEMENT

The MYP (Middle Years Program) covers the 9th and 10th Grade portion of the International Baccalaureate. The IB aims to develop inquiring, knowledgeable and caring young people who help to create a better and more peaceful world through intercultural understanding and respect. To this end the organization works with schools, governments and international organizations to develop challenging programs of international education and rigorous assessment. These programs encourage students across the world to become active, compassionate and lifelong learners who understand that other people, with their differences, can also be right.

AIMS

As a part of the Middle Years Program (MYP) of the International Baccalaureate program, the aims of the teaching and study of mathematics are to encourage and enable the student to:

- ✓ Recognize that mathematics permeates the world around us
- ✓ Appreciate the usefulness, power, and beauty of mathematics
- ✓ Enjoy mathematics and develop patience and persistence when solving problems
- ✓ Understand and be able to use the language, symbols and notation of mathematics
- ✓ Develop mathematical curiosity and use inductive and deductive reasoning in solving problems
- ✓ Become confident in using mathematics to analyze and solve problems both in school and real life situations
- ✓ Develop the knowledge, skills, and attitudes to pursue further studies in mathematics
- ✓ Develop abstract, logical and critical thinking and the ability to reflect critically upon their work and the work of others
- ✓ Develop a critical appreciation of the use of information and communication technology in mathematics
- ✓ Appreciate the international dimension of mathematics and its multicultural and historical perspectives

ROLE OF THE MYP AREAS OF INTERACTION

Throughout the year, all areas of interaction will be addressed. The areas of interaction are approaches to learning, health and social awareness, environment, community service and human ingenuity.

COURSE OUTLINE

The instructor reserves the right to modify as needed.

First semester:

- Linear Functions
- Systems of Equations
- Inverse Functions

- Matrices
- Quadratics Functions
- Polynomial Functions

Second semester:

- Square Root Functions
- Rational Functions
- Sequences, Series
- Exponential & Logarithmic Functions
- Conics

GRADING PROCEDURES:

We will follow the district's grading policy. Summative major grades 70% Summative minor grades 30%

Assignments:

Assignments showing only answers with no supporting work will not be accepted. Assignments that are not accepted are returned to the student not graded and treated as if they had never been turned in. Due to the fast paced nature of the course, students should not fall behind on their assignments. If a student is absent, it is their responsibility to obtain missed assignments and notes. I will not remind students to turn in missed work. Students that are absent due to a school activity must get assignments in advance. They should be current with the rest of the class when they return.

METHODS OF ASSESSMENT

Classroom assessment methods in MYP/Pre-AP Algebra 2 will cover a range of assessment methodologies, including selected response, constructed response, and performance-based assessments such as performance tasks, portfolios, teacher observations and conferences which will be evaluated using MYP criterion rubrics in knowledge, concepts, skills and organization/presentation.

MYP ASSESSMENT CRITERIA AND MYP MATH OBJECTIVES

Criterion A: Knowledge and Understanding

Criterion B: Investigating Patterns

Criterion C: Communication in Mathematics

Criterion D: Reflection in Mathematics

Sign-Up for the Home Access Center

<https://denhac2.dentonisd.org/HomeAccess/Account/LogOn?ReturnUrl=%2fHomeAccess%2f>

The Home Access Center will allow you to monitor your child's grades and attendance. My gradebook is updated regularly as I strive to enter my grades within a week of collecting them so that you may monitor your child's progress weekly.

CLOSING REMARKS

I am very excited about this school year and working with the students in my class. Parental support is greatly appreciated, and I hope to speak with all of my students' parents at some point during the year. Please call or e-mail me with any questions. I will be happy to discuss your child's progress at any time.

Parent/Student Information Sheet

Teacher: Marlene Nobles

Student Name: _____ **Subject/Block** _____

Tell me something special about your child: (abilities, interests, talents, future plans, etc.)

Tell me something that you think I should know about your child that might affect his/ her performance.

By signing below, you indicate that you have received and understand the syllabus for Algebra 2.
Please let me know if you have any questions.

Please complete this page and return it with supplies by next class.

Thank you!

Marlene Nobles

Student Signature: _____ **Date:** _____

Parent Signature: _____ **Date:** _____