## Algebra 2 Syllabus 2023-2024

## Mrs. Amy Evans

evansa@bledsoecountyschools.org

## Requested Supply List

* 3 Subject Notebook (no loose leaf paper, loose gets lost)
* Folder (2 pockets w/ prongs needed)
* PENCILS (Math is not ink friendly!)


## Classroom Rules

* Academic Integrity is the commitment to and demonstration of honest and moral behavior in an academic setting. This applies to classroom and at home online assignments.
* NO CHEATING! You run the risk of not receiving course credit.
* Listen and Read often!
* Be prepared for class.
* Don't get up without permission unless it is necessary.
* NO CELL PHONES! Cell phones must be turned off and placed in the calculator pockets each day.


## Grading

* 65\% Notes, Classwork, Review Packets, Homework, Activities, etc.
$>$ All Classwork, Homework, \& Review Packets must be completed 100\%.
* $20 \%$ Projects, Mini Quizzes, \& MasteryConnect Assignments
* Mini Quizzes; timed and occur 2 times a week after the first unit is complete
* MasteryConnect Mini Quizzes
$>4-10$ questions
$>$ 1-5 Specific Standards Assessed
$>$ Cube Root of \% Correct * 21.5443
* 15\% Term Exams via MasteryConnect
* EOC Assessment will be $15 \%$ of FIN score
* Percentages are subject to change!!!!


## Digital Platforms

* Skyward - Grades/Attendance
* Google Classroom - Communication \& Assignments
* enVision Savvas Realize (Textbook; Online Homework)
* MyLabsPlus - Homework
* DeltaMath - Review Packets
* MasteryConnect - Mini Quizzes; Benchmark Testing
* Quizlet; Blooket - Study Terms/Formulas/Games/Formative Assessments
* Zoom - Communication \& Presentation


## Algebra 2 Pacing Guide

| Lesson \# | Standard(s) | Title | $\begin{aligned} & \hline \text { Tentative } \\ & \text { \# day(s) } \end{aligned}$ | Tentative Dates |
| :---: | :---: | :---: | :---: | :---: |
|  |  | Unit 11 - Data Analysis \& Statistics | 5 | 8-8-8-14 |
| $\begin{aligned} & 11.1 \\ & 11.2 \end{aligned}$ | N.Q.A.1c <br> S.IC.A. 1 <br> S.IC.A. 2 | 11.1 - Statistical Questions \& Variables 11.2 - Statistical Studies \& Sampling Methods | 1 | 8-8 |
| $\begin{aligned} & \hline 11.3 \\ & 11.4 \end{aligned}$ | $\begin{aligned} & \hline \text { S.ID.A. } 1 \\ & \text { S.ID.A. } 2 \\ & \text { S.ID.A. } 3 \\ & \text { N.Q.A.1a } \\ & \hline \end{aligned}$ | 11.3- Data Distributions <br> 11.4-Normal Distributions | 1 | 8-9 |
| $\begin{aligned} & 11.5 \\ & 11.6 \end{aligned}$ | S.IC.A. 3 | 11.5-Margin of Error <br> 11.6 - Introduction to Hypothesis Testing | 1 | 8-10 |
| 3 Acts | S.IC.A. 1 | Mark \& Recapture | 1 | 8-11 |
|  |  | Review Packet \#1 | 1 | 8-14 |
|  |  | Unit 12 - Probability | 7 | 8-15-8-23 |
| 12.1 | S.CP.A. 1 | 12.1-Probability Events | 1 | 8-15 |
| 12.2 | $\begin{aligned} & \hline \text { S.CP.A. } 1 \\ & \text { S.CP.C. } 4 \end{aligned}$ | 12.2 - Conditional Probability | 1 | 8-16 |
| 3 Acts | 8.SP.B.4a | Place Your Guess | 1 | 8-17 |
| 12.3 | $\begin{aligned} & \hline \text { S.CP.B.2a } \\ & \text { S.CP.B.2b } \\ & \hline \end{aligned}$ | 12.3 - Permutations \& Combinations | 1 | 8-18 |
| 12.4 | S.CP.B.2b | 12.4-Probability Distributions | 1 | 8-21 |
| 12.7 (TN-3) | S.CP.B. 3 | 12.7 (TN-3) - The Law of Large Numbers | 1 | 8-22 |
|  |  | Review Packet \#2 | 1 | 8-23 |
|  |  | Unit 10 - Matrices | 3 | 8-24-8-28 |
| 10.1 | N.M.A. 1 N.M.A.2a N.M.A.2b | 10.1- Operations with Matrices | 1 | 8-24 |
| 10.2 | $\begin{array}{\|l} \hline \text { N.M.A.2C } \\ \text { N.M.A.2d } \\ \hline \end{array}$ | 10.2-Matrix Multiplication | 1 | 8-25 |
|  |  | Review Packet \#3 | 1 | 8-28 |
|  |  | Unit 1 - Linear Functions \& Systems | 9 | 8-29-9-11 |
| 1.1 |  | 1.1-Key Features of Functions | 1 | 8-29 |
| 1.2 | F.BF.B. 3 | 1.2 - Transformations of Functions | 1 | 8-30 |
| 1.3 | F.IF.B. 4 | 1.3 - Piecewise-Defined Functions | 1 | 8-31 |
| 1.4 | F.BF.A. 1 <br> F.BF.A. 2 | 1.4-Arithmetic Sequences \& Series | 1 | 9-1 |


| 1.5 | A.CED.A. 1 | 1.5-Solving Equations \& Inequalities by Graphing | 1 | 9-5 |
| :---: | :---: | :---: | :---: | :---: |
| $\begin{array}{\|l\|} \hline 1.6 \\ 1.7 \\ 10.5 \end{array}$ | A.REI.B. 3 <br> N.M.A.2d <br> N.M.A. 3 | 1.6 - Linear Systems <br> 1.7-Solving Linear Systems Using Matrices <br> 10.5 - Inverse Matrices \& Systems of Equations | 1 | 9-6 |
| 3 Acts | A.REI.B. 3 | Current Events | 1 | 9-8 |
| 3 Acts | N.M.A. 3 | The Big Burger | 1 | 9-9 |
|  |  | Review Packet \#4 | 1 | 9-11 |
|  |  | Unit 2 - Quadratic Functions \& Equations | 5 | 9-12-9-18 |
| $\begin{array}{\|l\|} \hline 2.1 \\ 2.2 \\ 2.3 \end{array}$ | F.BF.B. 3 <br> A.CED.A. 2 <br> F.IF.A. 1 <br> S.ID.B. 4 <br> A.APR.A. 2 <br> F.IF.B.5a | 2.1 - Vertex Form of a Quadratic Function <br> 2.2-Standard Form of a Quadratic Function <br> 2.3-Factored Form of a Quadratic Function | 2 | 9-12-9-13 |
| 3 Acts | F.BF.A. 1 | Swift Kick | 1 | 9-14 |
| 2.7 | A.REI.B. 4 | 2.7-Linear-Quadratic Systems | 1 | 9-15 |
|  |  | Review Packet \#5 | 1 | 9-18 |
|  |  | Unit 3 - Polynomial Functions | 9 | 9-19-9-29 |
| 3.1 | $\begin{array}{\|l} \hline \text { F.IF.A. } 1 \\ \text { F.IF.B. } 4 \\ \hline \end{array}$ | 3.1-Graphing Polynomial Functions | 1 | 9-19 |
| 3.2 | $\begin{aligned} & \hline \text { F.IF.B.6a } \\ & \text { F.BF.A. } 1 \\ & \hline \end{aligned}$ | 3.2 - Adding, Subtracting, \& Multiplying Polynomials | 1 | 2-20 |
| 3.4 | A.APR.A. 1 | 3.4 - Dividing Polynomials | 1 | 9-21 |
| 3.5 | A.APR.A. 2 F.IF.B. 4 | 3.5 - Zeros of Polynomial Functions | 1 | 9-22 |
| 3 Acts | A.APR.A. 2 | What are the Rules? | 1 | 9-25 |
| 3.6 | A.APR.A. 1 A.APR.A. 2 | 3.6-Theorems about Roots of Polynomial Equations | 1 | 9-26 |
| 3.7 | $\begin{aligned} & \hline \text { N.Q.A.1b } \\ & \text { F.BF.B. } 3 \\ & \hline \end{aligned}$ | 3.7-Transformations of Polynomial Functions | 1 | 9-27 |
| 3.8 (TN-1) | F.IF.A. 3 | 3.8 (TN-1) - Understanding Geometric Formulas as Functions | 1 | 9-28 |
|  |  | Review Packet \#6 | 1 | 9-29 |
|  |  | 9 Weeks Testing |  | 10-2-10-6 |
|  |  | Unit 5 - Rational Exponents \& Radical Functions | 8 | $\begin{gathered} \hline 10-16- \\ 10-25 \\ \hline \end{gathered}$ |
| 5.1 | N.RN.A.1a N.RN.A.1b N.RN.A.1c | 5.1 - nth Roots, Radicals, and Rational Exponents | 1 | 10-16 |


| 5.2 | N.RN.A.1c | 5.2 - Properties of Exponents and Radicals | 1 | 10-17 |
| :---: | :---: | :---: | :---: | :---: |
| 5.3 | F.IF.A. 1 <br> F.IF.B. 4 <br> F.BF.B. 3 | 5.3-Graphing Radical Functions | 1 | 10-18 |
| 5.4 | A.REI.A. 1 <br> A.REI.A. 2 <br> A.CED.A. 3 | 5.4-Solving Radical Equations | 1 | 10-19 |
| 3 Acts | A.CED.A. 1 <br> A.REI.A. 2 | The Snack Shack | 1 | 10-20 |
| 5.5 | F.BF.A.1a F.BF.A.1b | 5.5-Functions Operations | 1 | 10-23 |
| 5.6 | $\begin{aligned} & \hline \text { F.BF.B.4a } \\ & \text { F.BF.B.4b } \\ & \text { F.BF.B.4c } \\ & \hline \end{aligned}$ | 5.6-Inverse Relations and Functions | 1 | 10-24 |
|  |  | Review Packet \#7 | 1 | 10-25 |
|  |  | Unit 6 - Exponential \& Logarithmic Functions | 10 | $\begin{gathered} \hline 10-26 \\ 11-10 \\ \hline \end{gathered}$ |
| 6.1 | F.IF.A. 2 <br> F.IF.B. 4 <br> F.IF.B.6a <br> F.BF.B. 3 | 6.1-Key Features of Exponential Functions | 1 | 10-26 |
| 6.2 | A.SSE.A. 1 <br> a <br> A.SSE.A. 1 <br> b <br> F.IF.B. 5 <br> F.IF.B.5b <br> S.ID.B. 4 <br> N.Q.A.1d | 6.2-Exponential Models | 1 | 10-27 |
| 3 Acts | S.ID.B. 4 | The Crazy Conditioning | 1 | 10-30 |
|  |  | MasteryConnect Benchmark |  | 10-31-11-1 |
| 6.3 | $\begin{aligned} & \hline \text { F.BF.B.4b } \\ & \text { F.LE.A.1b } \\ & \text { F.LE.A.1c } \end{aligned}$ | 6.3 - Logarithms | 1 | 11-2 |
| 6.4 | F.IF.A. 2 <br> F.IF.B. 4 <br> F.IF.B.6a <br> F.BF.B. 3 <br> F.BF.B.4b | 6.4-Logarithmic Functions | 1 | 11-3 |
| 6.5 | F.LE.A.1b | 6.5-Properties of Logarithms | 1 | 11-6 |
| 6.6 | A.CED.A. 1 A.REI.A. 1 | 6.6 - Exponential \& Logarithmic Equations | 1 | 11-7 |


|  | F.LE.A.1a <br> N.Q.A.1d |  |  |  |
| :--- | :--- | :--- | :---: | :---: |
| 6.7 | F.BF.A.1 <br> F.BF.A.2 | 6.7 -Geometric Sequences \& Series | 1 | $11-8$ |
| 6.8 (TN-2) | F.IF.B.6b <br> F.LE.A.2 | 6.8 (TN-2)-Comparing Properties of <br> Functions | 1 | $11-9$ |
|  |  | Review Packet \#8 | 1 | $11-10$ |

