The Academy of Richmond County

**Advance Algebra: Concepts and Connections Mathematics Course**

Course Syllabus

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*M.A.T. Middle Grades Education, Augusta University*

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**Join Mr. Washington’s Tutoring Sessions at 3:15 p.m.**

**REMIND 101 CODE: @g93khha (Please Join at Remind.com)**

**Welcome to Richmond Academy: Home of the MUSKETEERS**

You are invited to participate in a collaborative classroom: a classroom where knowledge and learning is SHARED. Research shows that learning takes place more effectively when students work together, use dialogue, and discuss different strategies or perspectives to become knowledgeable independent learners.

**Course Description:**

Advanced Algebra: Concepts & Connections (27.08310) is the third course in a sequence of courses designed to ensure career and college readiness. It is intended to prepare students for fourth mathematics course options relevant to their postsecondary pursuits. High school course content standards are listed by big idea, including Data and Statistical Reasoning, Probabilistic Reasoning, Functional and Graphical Reasoning, Patterning and Algebraic Reasoning, and Geometric and Spatial Reasoning. In Advanced Algebra: Concepts & Connections, students will continue to enhance their data and statistical reasoning skills as they learn specific ways to collect, critique, analyze, and interpret data. Students will learn how to use matrices and linear programming to represent data and to solve contextually relevant problems. Students will strengthen their geometric and spatial reasoning skills as they learn how to solve trigonometric equations using the unit circle. In previous courses, students studied how to use linear and quadratic functions to model real-life phenomena. In Advanced Algebra: Concepts and Connections, students will further develop their functional and graphical reasoning as they explore and analyze structures and patterns for exponential, logarithmic, radical, polynomial, and rational expressions, equations and functions to further understand the world around them.

**Course Outline:**

The Advance Algebra: Concepts and Connections Curriculum is divided into several different units. The units are listed below:

|  |  |
| --- | --- |
|  Anticipated Units of Study  | Time Length (approximately) |
| Unit 1: Descriptive and Inferential Statistics | 5 – 6 Weeks  |
| Unit 2: Exponential and Logarithmic Functions | 5 – 6 Weeks |
| Unit 3: Investigating Radical Functions | 3 – 4 Weeks |
| Unit 4: Modeling Polynomial Functions | 4 – 5 Weeks |
| Unit 5: Investigating Linear and Algebra Matrices | 2 – 3 Weeks |
| Unit 6: Trigonometry and the Unit Circle | 3 – 4 Weeks |
| Unit 7: Exploring Rational Functions | 2 – 3 Weeks |
| Unit 8: Culminating Capstone Unit | 1 – 2 Weeks |

**Required Course Material:**

**1 Large** Three-ring binder with pockets **Pencils and Pens**

**8 Dividers** Markers

**Scientific Calculator**  **Highlighters**

1 Three Prong Folder with Pockets **Loose Leaf Paper (PLENTY!!!)**

Glue **Coloring Utensils**

**Ruler Earbuds (Mandatory)**

**Grading Policy:**

The following is a summary of basic course requirements:

|  |  |
| --- | --- |
| **Type of Assignment** | ***Grade Percentage*** |
| **Major Grades*** **Tests**
* **Projects/Performance Task**
 | ***40%*** |
| **Minor Grades*** **Quizzes**
* **Culminating Task/Etc.**
* **Classwork**
* **“Math *Fluency*” Exercises**
 | ***60%*** |
| **Intervention/Homework*** **Warm-Up Exercises**
* **IXL Homework**
* **Khan Academy Homework**
 | ***N/A*** |
| **Algebra EOC Assessment 1 (Teacher Made)****Algebra EOC Assessment 2 (GA Milestones)** | ***10% of 1st Semester Grade******10% of 2nd Semester Grade*** |

Along with the grading procedures, there will be a reward system designed to encourage completion, participation, and enthusiasm from **ALL** students.

**Grading Scale**

**A** = 100 – 90, **B** = 89 – 80, **C** = 79 – 75, **D** = 74 – 70, **F** = 69 – 0

**I.B. Conversion Chart**

Since Langford Middle School is an I.B. School, we will have projects and task that requires students to perform skills and task to show content mastery. When a project or task is labeled I.B., parents and students will see two grades. One grade will be the I.B. grade (numbered 0 – 8), and the other grade will be a numerical conversion grade. Below, you will see the conversion chart.



**Behavior Policy:**

Students are expected to be on their best behavior in the classroom, hallways, lunchroom, and anywhere else in the building. Students are expected to come into the classroom, prepared for engaging instruction. If students do not adhere to the classroom rules, Richmond Academy Code of Conduct and the RCBOE Code of Conduct, the following steps will be followed in order:

1st Offense: Verbal Warning redirecting targeted behavior

2nd Offense: Verbal Warning redirecting targeted behavior with a call home

3th Offense: Behavior Referral to Principal with a call home

4th Offense: Behavior Referral to Principal with a call home to schedule a parent conference meeting to address behavior and a development plan

**Course Assessment:**

**Tests and Formative Assessment**

Tests will be announced; but, quizzes may or may not be. So as a result, it is important to study notes and other materials covered in class for homework each night. There will be several formative assessment given for each unit so students can determine whether they’re adequately progressing. Generally, failing grades on formative assessment can be an indicator of possible future test grades, unless there is an intervention (i.e., attending tutor sessions). Please see Mr. Washington for additional help in this instance. **(For online/virtual learning formative assessments and test assignments will be posted to their designated Canvas Mathematics page. It will be listed inside their modules).**

**Daily “Warm Up/Engaging” Exercises**

Day to day practice problems that aids students’ mathematical skills, so they will become fluent to them. There are various problems a day, every day for 36 weeks. The practice activities are set up in a spiraling scope and sequence so that students practice at regular intervals. Each week problems are based on a grade-level appropriate topic so every time a skill shows up, it requires students to dig into their memories, recall what they know, and apply it to a new situation that’s correlated to the standards.

**Homework**

***Homework is online and every night (Monday - Sunday)***

**Homework Assignment: (Online) 30 Minutes of IXL or Khan Academy**

The homework will be checked by Mr. Washington online. **Homework is given regularly with the purpose of reinforcing what was covered during class and/or remediation/enrichment.** It is imperative that you complete **all** homework assignments**.** Math requires practice and action! The teacher will take time to set up students with a IXL account or Khan Academy account. By signing this syllabus, you acknowledge that the teacher (Mr. Washington) will create an account for your child in IXL or Khan Academy.

**Classwork**

Classwork grades will include some “*Math Fluency*” Exercises (daily enrichment/remediation problems), in-class assignments, group assignments, and Tickets out the Doors (TOTD). **(For online/virtual learning, classwork assignments will be posted to their designated Canvas Mathematics page. It will be listed inside their modules).**

**Projects, Culminating Task, Performance Task**

Students will have a variety of formative assessments and tests throughout the year. At least one project/culminating task/performance task will be assigned each grading period. This will be an extension or enrichment of the concepts discussed. Students will have 1 to 3 weeks to complete each project depending on the complexity of the task. Some tasks and/or projects will be completed in class. **(For online/virtual learning projects, culminating task and performance task assignments will be posted to their designated Canvas Mathematics page. It will be listed inside their modules).**

**“Make-up” Work and “Missing” Work**

Mr. Washington strongly advises students not to miss class. However, if students are absent, it is their responsibility to make-up for missed work. Students should begin any assignments that can be completed outside of the classroom immediately. Students must provide an excuse for their absence(s) when they return to school in order to make-up and submit missed assignments. All work must be made up within the ***specific*** given time frame (e.g. if a student misses 2 days of school, they will have 2 days to complete the make-up work, after receiving make-up work). With missing work, students will have the opportunity to turn in missing work with points deducted (5 points deducted everyday up to 5 days, afterwards, it will be the teacher discretion to accept the assignment).

**\*\*In Addition: We will designate the last week of each semester** **as “Make – Up Week.” This will give the students a chance to make up any assignment that they are “*MISSING”*. The student can make-up or retake a previous assessment to earn a higher grade. It is the student responsibility to turn in all work!!!**\*\*

**Contacting Mr. Washington**

The best way to get in contact with Mr. Washington is to email him at washiwa@boe.richmond.k12.ga.us. Once the school year progresses, parents will be able to reach Mr. Washington through his personal cell phone. The cell number will be given out at a later time. In addition, parents can leave a message in the front office for Mr. Washington to receive. Your thoughts and concerns are highly important to Mr. Washington.

**Expectations:**

The overarching expectation in this class is **RESPECT**: respect for yourself, respect for other students, respect for Mr. Washington/or any individual in authority, and respect for any guests that may enter our class. Although this encompasses all other expectations, Mr. Washington will outline several others for the sake of clarity.

1. Be a **S.T.A.R. (S**tudent **T**aking **A**cademic **R**esponsibility).

**YOU** **are responsible** for your education!

**YOU** determine your success or failure!

1. High expectations – **ALL DAY, EVERY DAY!**
2. Remain **SEATED** and **PREPARED** at all times.
3. Bring **ALL** materials to class **DAILY (see required course materials section).**
4. **Every student is responsible** for helping to maintain a clean, safe learning environment. **Your area must remain CLEAN at all times.** The floor should be clear of trash, paper, and personal belongings.
5. Adhere to all policies, rules, and regulations outlined in the student handbook.
6. Expect this course to have high rigor and high academic learning. Do not be afraid to ask questions and clarify your misconceptions.

**Parent Checklist:**

Mr. Washington would appreciate your attention to the following checklist:

1. Periodically check your child's notebook and agenda for neatly completed assignments. Learning is a team effort.
2. Encourage development of good study skills, especially organization of time and materials.
3. **Do not wait until it’s too late to help your child (from grades, behavior, make-up work, tutoring, etc).**
4. Ask your child if he/she needs extra help. **Tutoring is available.**
5. Attend, whenever possible, Math functions and conferences.
6. **Remember:** Math activities need extra practice time just like sports, dance, and music.
7. I have read this course syllabus and will support Mr. Washington in educating my child.

**Let’s work together so that we can have a successful year while increasing our math power!**

**If possible please donate the following items for classroom usage:**

1. **Kleenex**
2. **Disinfectant Wipes**
3. **Hand Sanitizer**
4. **Paper Towels**
5. **Band-Aids**

Your Input is Valued and Needed

Mr. Washington’s definitive goal is to create and foster a collaborative classroom in which students take a proactive role in their learning. At this time, Mr. Washington extends an opportunity for students and parents to voice their opinions, concerns, and expectations of this course and of Mr. Washington.

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**Teacher’s Signature: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Date:** \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

**Student’s Signature: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Date: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**

**Parent’s Signature: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Date: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**

**Parent’s Phone Number: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Date: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**

The above signatures acknowledge that we (student, parent, and teacher) agree with the information covered in this syllabus. If there is a problem, please contact Mr. Washington at washiwa@richmond.k12.ga.us or 706-737-7152

**PRINTED Student’s Name: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**

**Homeroom Teacher: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**