

# Accelerated Mathematics 8<sup>th</sup> Grade

## 2013/2014 Syllabus

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### Course Description

Expanding on the concepts learned in Algebra I, Algebra II equips students with the necessary tools to succeed in higher mathematics. While building on mathematical concepts and problem solving skills developed in prior math classes, students are presented with new concepts that broaden their mathematics experience.

### Expect to be stretched!

This course goes deeper and is more abstract than the concepts that were presented in Algebra I. It requires students to stretch their brains and, at times, to struggle with a new idea for a while until they “get it”. Students will be challenged to commit the necessary time and effort to achieve mastery of these new concepts. Students are encouraged to work with each other, ask questions during class and seek extra help from me when needed.

Successful learning involves a team – the student, the teacher, and the parent(s). Parents: Please do not hesitate to contact me if you see your child struggling in this class or you have any questions or concerns. The best way to contact me is through email ([jennifer.kiser@jefferson.kyschools.us](mailto:jennifer.kiser@jefferson.kyschools.us)) or by phone 485-8299.

### Course Overview/Sequence of Topics – Fall Semester

During this course the students will deepen their understanding of:

- ❖ Linear Equations, Inequalities, and Functions
- ❖ Systems of Equations
- ❖ Matrices
- ❖ Quadratic Functions
- ❖ Polynomials and Polynomial Functions
- ❖ Powers, Roots, and Radicals\*
- ❖ Rational Equations and Functions

\*Selected topics as time permits

### Technology Overview

During this course the students will use a variety of mathematical representations and will be instructed in the use of various tools and technologies to model mathematical situations in solving meaningful problems. The technologies used during this course will include, but is not limited to the TI-83/84 graphing calculator, TI-Connect Software, JCPS online, and TI APPS.

Example of assignments:

- graphs may be generated using the graphing calculator, then pasted into a document using TI-Connect, and then submitted to Mrs. K on JCPSonline
- use the graphing calculator to generate and interpret graphs in real world applications

### Required Materials (required in class every day)

- ✓ 3-ring binder with 4 section dividers (1 ½” – 2”)
- ✓ Pencils(mechanical recommended)
- ✓ Notebook paper
- ✓ Graph paper
- ✓ Textbook (covered)

**Required Materials (for use at home)**

- ✓ Graphing calculator - (TI-84plus, TI-84, or TI-83) Please have for at-home use by the 3<sup>rd</sup> week of school. If this deadline is a problem please contact me.
- ✓ TI-Connect Software (this comes with your graphing calculator or can be downloaded for free at <http://education.ti.com>)
- ✓ USB cable to connect graphing calculator to the computer (this comes with the graphing calculator; these are also available to be borrowed from Mrs. K)

**Other Required Materials**

- ✓ 2 AAA batteries
- ✓ 1 box of Kleenex
- ✓ 1 box of paper towels

**Wish List**

- Index Cards
- Dry erase markers
- Antibacterial wipes

**Student Expectations: In order to maximize your education, it is essential that you be a responsible, active learner.**

1. Be respectful.
2. Participate in classroom activities.
3. Be in your seat **ON TIME**. (3 tardies will result in team detention)
4. Be prepared. Bring all materials to class **EACH DAY**. You will not be allowed to return to your locker once class has started.
5. Follow all classroom procedures and school rules.
6. You will not bring drinks, food, seeds, gum, or candy into the classroom.
7. Turn in assignments on time. Late work will **NOT** be accepted, except for an absence.
8. All student work must be original. **Copying of any nature (tests, quizzes, homework, class work, and projects) will result in a grade of zero for all individuals involved, including the person allowing the copying to take place.**

**Discipline:** Depending on the severity and frequency of the behavior, students may be disciplined by one or more of the following:

- |                            |   |                    |
|----------------------------|---|--------------------|
| Warning/redirection        | Removal from activity/alternate assign. | Parent contact     |
| Student/teacher conference | Team detention                          | Referral to office |

**Grading Procedure:**

Grades are composed of 3 major components: Student Engagement, Student Progress, and Student Mastery. Each component is comprised of the following categories:

Student Engagement	Student Progress	Student Mastery
Participation - 10%	Homework - 20%	Tests - 20%
Binder/Notebook - 15%	Classwork - 20%	Performance Assessments - 15%

\*Participation may include, but is not limited to preparedness, updated notebook, class involvement, and group work.

**Participation**

To meet the challenges of this course you will be expected to actively participate. This means speaking up, interacting with others, explaining and sharing ideas, asking questions, and listening to what others have to say. Discussing possibilities and concepts in this way will help you understand mathematics at a deeper level.

### Homework:

Homework is given on a regular basis and is graded based on completion. The problems from each lesson reinforce previously-learned skills and concepts and prepare students for new ones.

- Homework is checked daily. A zero will be given when homework is not completed, not out at the time of check, OR when work is not shown.
- Homework answers will be reviewed in class. **Students are expected to make corrections on their homework and ask for help if needed.**
- Work must be shown on all homework.
- Late homework will not be accepted.
- Homework is an individual effort. This does not mean students cannot ask for help from a peer if needed or refer to the answer in the back of the text to see if their answer is correct. These are both great ways to learn. However, splitting up the assignment between classmates or copying answers is not acceptable and, if caught, all involved will receive a zero on the assignment.

### Tests

- Tests are given at the end of each chapter and will assess current material and older material.
- District Assessments will be given four times throughout the year.
- Prepare for assessments. You are expected to be ready. I recommend you reread the chapter, study all daily work, and review Notes/Reference section.

### Performance Assessments

Performance assessments will be given throughout units to assess student knowledge of content. Performance assessments may include, but are not limited to problem sets, projects, skills checks, concept checks.

**Absences: Attend class on a daily basis. It is important that you are here. If you are absent, it is YOUR responsibility to get the make-up work and turn it in on time.** The school attendance policy will apply to any absences. Assignments will be posted in the room for you to check when you return.

- You will have the number of days that you were absent plus one to make up missed work.
- If you are absent on the day of a test, you must set up a time with Mrs. K to make up the test.
- Tests not made up within one week of return will be scored as a zero.
- When absent for a band concert/orchestra/similar activity, due dates for homework/projects/etc. stay the same. Students must turn them in during homeroom before going downstairs for the concert/activity. Work turned in late will result in a zero.

### In Need of Extra Help:

- ❖ I am available after school on Wednesdays until 3:15. This time can be used for extra help, a quiet place to do work, or to make up quizzes/tests/homework.
- ❖ Check out my website for homework assignments and other helpful information:  
<http://www.teacherweb.com/ky/mevzeek/kiser>

\*\*\*The teacher has discretion to change classroom procedures in order to meet student needs.

## Accelerated Mathematics - Grade 8 Syllabus Review and Agreement

### Student Agreement

I have read this syllabus and understand the content and expectations of this course. As a student in this class I will:

1. Know and follow all rules and guidelines in this syllabus.
2. Keep graded assignments in a notebook or binder until the end of each grading period.
3. Be responsible by doing my homework and other assignments on time.
4. Seek help when confusion strikes.

\_\_\_\_\_  
Student Name (printed)

\_\_\_\_\_  
Student Signature

### Parent Agreement

I have read this syllabus and understand the content and expectations of this course. As a parent of a student in this class I will:

1. Encourage my child to do his or her best in the study of Algebra and Geometry.
2. Contact the teacher when questions or concerns arise about this class.

\_\_\_\_\_  
Parent Name (printed)

\_\_\_\_\_  
Parent Signature

\_\_\_\_\_  
Parent Name (printed)

\_\_\_\_\_  
Parent Signature

Parent Contact Info:

\_\_\_\_\_  
Phone number where you can be contacted during the day

\_\_\_\_\_  
Phone number where you can be contacted during the evening

\_\_\_\_\_  
Email address