Algebra IIC
Ms. Emily Campbell

Contact Information: If at any time you have a question regarding your student's progress or the course in general, feel free to contact me during my planning period (approximately 10 a.m. to 11 a.m.) at (606) 287-7155 or by email at emily.campbell@jackson.kyschools.us .

Prerequisite: The student must have successfully completed Algebra I, Algebra IIA, and Algebra IIB.

Course Description: Fundamental skills of mathematics will be applied to the following topics: multistep equations and inequalities; matrices; systems of equations and inequalities; complex numbers; solving quadratic equations and inequalities; relations and functions; polynomial equations and functions; rational exponents and expressions; rational equations and functions; exponential and logarithmic functions; arithmetic and geometric sequences and series; conics; trigonometric functions; and probability. Technology will be used to introduce and expand upon the areas of study listed above.

Units of Study: Each of the above mentioned mathematical topics will be transformed into a unit of study, which will be taught during this school year.

Course Objective:
Students will be able to:
Solve multi-step algebra problems/inequalities, radical equations, and solve absolute value equations/inequalities.
Add, multiply, subtract, calculate the determinant of, find the inverse of, solve equations of, and apply operations to matrices.
Solve systems of equations using various methods, graph systems of equations/inequalities, and interpret solutions of systems of equations/inequalities in context.
Define, simplify, and perform operations on an imaginary number; and add, subtract, multiply, divide, and simplify complex numbers.
Solve, interpret, and graph systems of quadratic equations and inequalities..
State the domain and range and determine if a relation is a function given a set of ordered pairs; write equations and find solutions by substitution in function notation; recognize the graph of, graph, transform, determine domain and range of functions.
Factor, apply theorems to, and solve polynomials; identify characteristics of different functions; graph, classify, and determine behavior of polynomial functions.
Apply basic properties and simplify rational roots; add/subtract/multiply/divide/simplify radical expressions and fractional exponents.
Solve, graph, and interpret rational functions.
Define, find the inverse of, differentiate between, and perform transformations on logarithmic and exponential functions.
Distinguish between, calculate sums, create rules, calculate term values of, and write/solve patterns using arithmetic and geometric sequences.
Write equations for and/or graph circles, conic sections, parabolas, ellipses, and hyperbolas.
Define, calculate values for, apply, evaluate expressions, and trigonometric functions.
Define terms for, apply principles, calculate events, make predictions, and write set notation all using probability.

Grading Policy:
92-100 A
81-91 B

70-80 C
60-69 D
0-59 F

Each nine-week grade will be calculated in the following way:
60% Summative Assessments (Exams)
40% Formative Assessments (Homework, Quizzes, Daily Work, etc..)
The final grade will be calculated in the following way:
40% First nine weeks
40% Second nine weeks
20% Final Exam

Attendance Policy: As written in the Student Handbook

Classroom Tardy: The student will be counted tardy if they are not in the classroom and ready to work by the time the bell rings. After five (5) tardies, the student will be referred to the office. For each tardy, the student will lose 20% of their weekly participation grade.

Leaving the Classroom: Each student will be issued one coupon per nine-week grading period. This coupon can be turned in and used as a hall pass or turned in at the end of the grading period. If the coupon is turned in at the end of the grading period, the teacher will drop up to fifty (50) points worth of the student's lowest homework/daily/quiz grades. In accordance to school policy, no student will be permitted to leave the classroom in the first or last ten (10) minutes of the class period.

Materials Needed: Students will need the following materials (other materials may be needed during the year and you will be notified).

- Pencils Only (Work done in anything else will not be accepted.)
- Erasers
- 3-Ring Binder
- Loose-Leaf Graph Paper
- Page Dividers/Folders

Other Guidelines and Expectations:
- Students are to be respectful of each other, the teacher, and anyone else in the classroom at <u>ALL</u> times. Inappropriate behavior will not be tolerated.
- Students will be expected to keep a 3-ring binder containing all notes, homework, quizzes, exams, activities, and open responses. Each item in this binder must be hole-punched, dated, and kept in chronological order. Random binder quizzes can be expected. This binder is only to be used for this class.
- There should be a place inside the student's binder, either separated with a page divider or folder, where ACT Prep problems are kept. Students will have released ACT problems as warm-up activities at the beginning of class on a regular basis.
- Students are encouraged to ask questions and participate fully. No on-task question will be ignored.
- The student is responsible for completing any missed work. Each day's assignment will be written on a calendar displayed in the classroom. It is the student's responsibility to look in the "Make-Up Work" binder and get the corresponding handouts/assignments for each day missed. The student will be responsible for getting the notes he/she missed from the teacher or fellow classmate. If I collected

work while the student is absent, he/she will need to place it in the "Make-Up Assignment" folder. The assignment will only be accepted for full credit if the absence is excused. Other late work will have 10% of the possible points deducted per day late.
- Class is over when the teacher dismisses class. No one is to gather their materials, close their books, or put away pencils until the teacher dismisses class.
- Ms. Campbell may add or revise classroom policies and procedures when necessary.

*Parents/Guardians,

I'm very excited to have your child in class this year! I'm looking forward to working with you and your child to make this a successful and enjoyable year! Let me know if you have any questions or concerns! Thank you!

<div align="right">-Miss Campbell</div>

This syllabus must be kept in the front of your classroom binder. Please read and discuss this syllabus with your parents/guardians. Then detach the bottom half of this page. It must be signed and returned to Ms. Campbell on, or before, Monday August 12th for an exam grade.

We have read and discussed the above policies and procedures and understand the importance of following them at all times.

Parent or Guardian Signature_____ Date_____

Student Signature _____ Date_____

Parents or Guardians, please include your email address for more efficient communication:

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