Algebra 2B Course Syllabus
2016-2017

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Room: A229

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<u>Need Help??</u>

Seminar: Tuesdays & Thursdays

After School Help Sessions: by appointment

Textbook: Glencoe, <u>Algebra 2</u> (Books may be checked out upon request.)

Materials Required:

- TI-83+/84+ or compatible graphing calculator (The TI-83/84 will be used in class for demonstration by the teacher; students using another brand will need to be able to navigate their user manual on their own!)
- Pencil, eraser, 3-ring binder to organize notes, homework, etc.

Course Description:

Algebra 2 is designed for all students preparing to enter the work force or continue study at the post-secondary level. Students will further develop algebraic skills and integrate their more recent study of Geometry.

Course Topics:

Unit 8: Discrete Mathematics:
Students will study arithmetic sequences and series, as well as the binomial theorem and its applications to algebra and statistics.

Unit 9: Trigonometry: (Triangles)
Students will explore trigonometric functions for right triangles and for points on the unit circle. Students use the trig functions to explore amplitude and period.

Unit 10: Trigonometry: (Unit Circle)
Students will explore trigonometric functions for right triangles and for points on the unit circle. Students use the trig functions to explore amplitude and period.

Unit 11: Statistics and Measurement of Data
Students are introduced to basic statistical treatment of data, including bias, sampling, measures of center, measures of spread and the creation and use of various graphs and charts.

Unit 12: Rational Expressions and Equations (Algebra)
Students extend basic arithmetic operations to rational expressions and extend solving equations to rational equations and inequalities. They graph rational functions and identify discontinuities in the graphs. They investigate equations that represent direct, inverse, and joint variation. They look at graphs of various shapes, including continuous curves, discontinuous curves, and lines, and associate each graph with a specific kind of function.

Unit 13: Rational Expressions and Equations (Graphing, end behavior, holes, asymptotes)
Students extend basic arithmetic operations to rational expressions and extend solving equations to rational equations and inequalities. They graph rational functions and identify discontinuities in the graphs. They investigate equations that represent direct, inverse, and joint variation. They look at graphs of various shapes, including continuous curves, discontinuous curves, and lines, and associate each graph with a specific kind of function.

Teaching Format:

Class will begin promptly with a warm-up. After the warm-up, you will be expected to correct your homework. Time will be given to discuss questions on the homework. Next, the new lesson will be covered through a variety of learning strategies.

Grading Procedure

Tests (70% of the Semester Grade)
There will be periodic tests at appropriate checkpoints (some chapters will have more than one test). **If you are absent on the day of the test, be prepared to take it on the day you return**. Retest policy: See WOHS Math Department Guidelines.

Quizzes (25% of the Semester Grade)
There will be periodic quizzes to check for understanding during each unit. If you are absent on the day of the quiz, be prepared to take it on the day you return. **No retakes are given on quizzes.**

Homework (5% of the Semester Grade)
Homework will be checked daily and recorded based on completion. All missing and incomplete assignments must be completed by test day (with partial credit for assignments turned in after the due date, but before the test date). Homework completion is defined as homework in which adequate and required work is shown and steps are given to support the answers.

Expectations:

1. Arrive on time and be prepared. (See tardy policy below.)
2. Respect other students, the teacher, and the classroom.
3. Participate in class discussions and activities (a good *participator* is also a good *listener*).
4. Please refrain from eating or drinking in the classroom. (You may bring a water bottle.)

Guidelines:

1. Be a risk-taker: ask questions when puzzled, unsure or skeptical.
2. Be caring: raise your hand respectfully to be recognized if you have something to share.
3. Be principled: act with integrity and honesty, take responsibility for your actions.

Bathroom Policy:

One at a time. A hall pass MUST be used. Please refrain from asking to leave the room during guided notes.

Absence/Tardy Policy:

We will follow the WOHS absence and tardy policy as outlined in the school handbook.

       1st tardy: Verbal warning.
       2nd tardy: Verbal warning.
       3rd tardy: Lunch detention.
       4th +: Lunch detention and a parent phone call.