



## **Algebra 2 (ages 14 and up, prerequisite Algebra 1 and Geometry): Felder Algebra 2**

**Wednesdays AND Thursdays, 1-2:15 PM**

Algebra 2 is a bridge course between being able to compute and solve basic algebraic problems to using the powerful techniques that make calculus possible. The key to Algebra 2 is the understanding of functions and their role in mathematics. Students will explore linear, quadratic, rational, exponential and logarithmic functions in depth. They will also solve absolute value, radical, rational, logarithmic and exponential equations and inequalities. Additional topics include complex numbers, conic sections, trigonometry, elementary statistics, and sequences and series.

In all these topics, students will discuss the historical context of their development and the reality that mathematics did not emerge fully formed into a textbook but rather required centuries of development and hundreds of mathematicians and ordinary people learning from one another. Students will also focus on how the more abstract topics in Algebra 2 tie back to the concepts learned in Algebra and Prealgebra.

Students will have a weekly quiz and several exams. Students will be expected to participate actively in class. Parents will be expected to discuss and evaluate how their student is doing, confirm that they are doing the expected work, and encourage students to get the help they need. Algebra 2 can be taken as an honors course. Grades will be assigned, and parents will be provided with a course description for the child's transcript. After successfully completing this course, students should take Precalculus. **Please note that this class will meet two afternoons a week, Wednesdays AND Thursdays, from 1-2:15, for the entirety of the Deerstream year.**

**Text:** *Felder Algebra 2.* **Note:** *There is a \$30 fee for a consumable lab book for this course.*

**Prerequisites:** As a prerequisite, students who are not enrolled in Geometry at Deerstream will need to submit proof of successful completion of Algebra 1, including a grade of B or higher, and proof of appropriate progress through Geometry, or have teacher recommendation. As Algebra 2 is a high school level course, students should be able to function in the classroom at a high school level. Students are expected to maintain an organized notebook, keep track of assignments, and attend the weekly office hour to get help as needed.

**Homework:** Students will be expected to complete daily homework assignments and correct their work; work at home should take an average of 4-5 hours per week.