Advanced Algebra

Mrs. Bond

Course Description:

This course covers the topics found in Advanced Algebra using the third book in the three-year *Discovering Mathematics* series by Key Curriculum Press. *Discovering Advanced Algebra: An Investigative Approach* is an inquiry-based curriculum that uses investigations to bring mathematical concepts to light. While students work in groups and focus on communication skills, their work with the investigations helps develop critical thinking skills while fostering deeper understanding of mathematical concepts necessary for lifelong mathematical use and learning. *Discovering Advanced Algebra* works with real world data, focuses on techniques for data analysis, and employs technological tools for conceptual modeling to better prepare students for future educational and career opportunities in this ever changing world.

While taking this course students will be expected to:

* Work in groups to analyze problems
* Learn about group cooperation and roles in group learning
* Develop strategies for solving problems
* Express mathematical ideas orally and in writing
* Use concrete mathematical models in various situations
* Make connections between concrete mathematical models to mathematical concepts and principles
* Read and interpret a given problem using mathematical terms
* Organize and present information/data in the form of a table, graph, and/or diagram

Materials:

* Graphing calculator – It is recommended you purchase your own graphing calculator

(TI-83 or TI-84), which will be used for all your math classes in high school.

There is a classroom set of calculators available for use **in the classroom**. Students will be responsible for the calculator they use. If the calculator is damaged, the batteries are missing, or the calculator is missing your student will be responsible for any replacement fees.

* Pen or Pencil
* 3-Ring Binder (or section)
* Paper
* Pack of AAA batteries

Textbooks:

The primary book is *Discovering Advanced Algebra*. We will have books available to use in the classroom and the book is available online. If you need a book at home, textbooks will be checked out on an individual bases. If you check out a book you will be responsible for the book for the duration of the school year. Students will be charged for missing or damaged books at the end of the year.

Grading:

Grades will be determined with the DPS grading scale and will be based on quizzes, exams, homework and class work. Every Friday you will have either a quiz or an exam, if you are absent you have until 3:00 on Wednesday to make it up.

* Exams will be given at the end of every unit. Some exams (or parts of exams) may require the use of a graphing calculator. All exams are closed book with no notes and will be a combination of open response questions and multiple choice questions. Students are required to support their answers with appropriate work or justifications on each problem.
* Quizzes will be given on Fridays when there is no exam. Most of these quizzes will be open note and based on current material and ACT material. Quizzes may include multiple choice questions or open response questions.
* Retention Quizzes will be given every week, highlighting concepts you need to know. If you are absent for a retention quiz, the summative quiz at the end of the grading period will make up for any missing quizzes.
* Homework will be given regularly. The solutions and work to all problems will be available for students to check their work and understanding.

Make-up work: If you miss class for any reason, you are not excused from the work assigned that day. It is your responsibility to request make-up work or schedule time to make up tests. Make-up work will only be given at lunch, before and after school. Do not plan on having class time to makeup work. All notes will be posted online at: tj-bond.wikispaces.com

To the parents:

This information sheet is to help you know the expectations and requirements that I have for all students.

This is not the only information your student will need. Good attendance, listening to directions, taking notes, asking questions for understanding, participating in all activities and working cooperatively with others as a team is critical to your student’s success.

Please come in for help if you have questions. I am available before school, lunch, after school, and during office hours if your student has questions. I will be more than happy to work with him or her.

Please contact me at any time with questions:

Phone: 720-423-7136

E-mail: [aimee\_bond@dpsk12.org](mailto:aimee_bond@dpsk12.org)

Website: tj-bond.wikispaces.com

Classroom Expectations:

I am aware most of you have no need for these to be stated, but for the sake of clear communication my behavioral expectations are listed below.

* Respect me, your classmates, the materials and the expectations of TJHS
  + Use language wisely: no profanity, no negativity
  + Please no food or drinks (water OK)
  + No cell phones, headphones, electronic games, or video or audio devices will be allowed in the classroom.
  + Please leave the classroom in the same condition in which you arrived.
* Do not talk while others are talking. If you have something to contribute, please raise your hand. If you don’t understand something, ask a question. THERE IS NO SUCH THING AS A DUMB QUESTION. As long as questions are legitimate, I will take time to answer them. Note: unrelated and excessive conversation does not help you or your grade.
* Bring all supplies to class. Make sure you have multiple sheets of paper and pens.
* No personal grooming (make-up, especially) in class.
* Listen when others are talking. I encourage open, honest discussion, and I expect everyone to remain attentive and interested.
* Maintain a positive attitude.
  + Tone of voice
  + Facial expression
  + All criticism needs to be constructive
* Take responsibility for yourself and for your learning.
  + Turn work in on time.
* Listen to directions. Follow them the first time.
  + Be ready to take instruction giving me your full attention when I’m speaking to the class.
* Stay on Task
* When I give an assignment, I expect it to be done. If you are confused, please ask me to clarify.
* Do not do other teachers’ coursework in my class.
* We will do a considerable amount of cooperative group work. Often, students are tempted to digress or socialize. Please stay on task. Failure to stay on task will lower your participation grade.
* Try Your Best