South Gibson County High School

Algebra II Honors

Fall 2018

Instructor Contact Information:

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Course Description:

• This course is for the mathematically talented student who desires an extensive and comprehensive treatment of Algebra II topics and who intends to take the maximum units of high school math. Students will be expected to develop an in-depth understanding of the topics including functional analysis, and will be expected to draw relationships among the concepts studied. Use of a graphing calculator will occur through the course. Additionally, career-related topics will be presented. A good balance of activities, practice, and re-teaching and will included in lessons to assure that the material is covered and that students demonstrate learning. In addition, lessons will contain a variety of experiences in order to address the range of learning styles. This class is very rigorous. It has taken some pre-calculus standards and moved them to Algebra II.

Required Texts and Other Supplies:

- Textbook: Algebra 2, Volume 1 and 2, Kanold, Burger, Dixon, M. Larson, and Leinwand
- Students should bring the following items to class everyday:

Binder and Paper for notes and assignments

Pencils (at least two and NO PENS)

Calculator (optional) – Scientific calculators are allowed. Students may purchase a TI-graphing calculator if desired. We will use the graphing calculator throughout the semester, but I realize these are expensive. These calculators (TI-83 Plus, TI-84 Plus, TI-Nspire) will be useful throughout high school and college, but they are optional.

Assignments:

- Major Assignments/Assessments
 - O I plan to have a test at least every 2 to 3 weeks, sometimes sooner, as well as 2 cumulative tests (the mid-term, Oct. 10 and 11, and final, Dec. 18 and 19). Tests will be announced about a week in advance. Tests will normally be worth 100 points. Grades will be figured using 80% for formal assessments (tests and projects) and 20% informal (homework, small quizzes, exit tickets, etc.).
 - Students will also be required to complete projects (group and individually) throughout the semester. These will be announced weeks before they are due. A brief description of projects is listed at the end of the syllabus. Projects are graded on a rubric that will be handed out before the project is started. All rubrics will contain a completeness, organization/neatness, and timeliness component. The other components will be based on the projects.
 - The tests will be cumulative which will lead to higher mastery of course objectives and will better prepare students for the cumulative end-of-course state test at the end of the course. The projects will help students develop a deeper and more meaningful understanding of the subject matter.
 - Due to the nature of the TNReady, students will participate in challenge problems at various times during the school year. These will be done during class in a 30-minute time frame. These will be graded on a rubric and will count as a formal grade.
- Daily Assignments
 - Daily Assignments will range from problems of the day, quizzes, notes, and other in-class assignments. Some of these will be checked for completion and others will be checked for accuracy.
 - It is important for the teacher to assess the students as the class progresses. Not all of these
 assessments should be in the form or quizzes or tests. With daily assignments, the teacher will be able
 to check for comprehension and the need for re-teaching or extra practice as deemed necessary.

Using these assessments, students should exhibit more mastery of the standards throughout the course. Small assignments along the way also help students prepare for the major assessments.

Homework

- O Homework problems will be assigned every night, besides test days. These problems will not be overwhelming in number and should be attempted every night. Skipping homework will cause you to get behind and your class grade and test scores will be affected. These assignments will be randomly checked in the form of a walk around check or a homework quiz. These checks will be unannounced.
- o It is important to remember that each assignment is vital to your success in high school, and college for that matter. If you need help, ASK! That's what we're here for.
- o This will reinforce study skills and individual learning which will be an important skill for post secondary course work (i.e. college, trade school, etc.) Therefore, attempting and completing homework assignments is vital to success in the class. More meaningful instruction can occur when students know what questions they have regarding the material. Students will be able to ask questions every day over the homework, so it is helpful attempt the homework in order to know what to ask about.

Progressive Grading:

The goal of the teacher is to ensure all students master the standards, obtain a rich knowledge of mathematics. Progressive grading is part of this classroom to ensure these things. Progressive grading is used to allow students to be able to "change their grade" throughout the semester. Students must maintain knowledge of all content covered to be successful on classroom tests and the end of year test. Therefore, as we go throughout the semester, each test will contain new material and parts of older content. All students are required to complete all tests. If a student is unhappy with a previous test grade, and a new test contains material from that chapter, a student's grade on that section of the new test can replace the old test. Because of the cumulative nature of all tests in this class, students will have multiple opportunities to improve their grades. There will be NO retakes throughout the semester. Each student's grade will stand until the material is tested again on another test in the future. Material covered on each test will be announced so students can study accordingly. Failing this course is possible. If, after all academic support and progressive grading, the grades remain failing, a decision will be made about retaking the course or credit recovery. This decision will be made with the administrators, parents, and the teacher based on student performance and what would benefit the student the most.

Make-Up Work

- All missed class work or tests may be made up if the student makes the request immediately upon returning to school and if class time is not taken from other students. Make-up work must be completed within 5 days of the day missed in order to receive credit. Missing assignments will be indicated by a "o" in the gradebook until the grade is made up. It will remain a "o" if the work is not made up in the allotted time frame mentioned above.
- You are responsible for your own work. It is your responsibility to get the notes/assignments you missed from someone in your class. We will be doing something content-related every day in this class. After you have asked a classmate for the notes/assignments you have missed, you can then come to me for further clarification and to set up a plan to make up the work. Students are encouraged to use the PASS Program and/or the daily RTI/Focus sessions.

Assignments/Assessments Expectations:

- South Gibson County High School strives to be a training ground for college and career readiness. Therefore, all students are expected to complete all assignments that support the learning of the state standards and complete those assignments to an acceptable level of mastery and in a timely manner.
- In the event that a student does not meet the requirements of an assignment/task, the following consequences will be implemented within the Mathematics Department in Honors Classes:
 - Late: On unit homework, there will be 5 points deducted for every day late. If the homework is more than a week late, the highest grade one can receive is a 70. For projects, if it is less than a week late, 5 points will be deducted and parents will be contacted. If it is less than 2 weeks late, 10 points will be deducted. After that, the student and teacher will agree to an acceptable solution.

- Unsatisfactory Level of Performance: On informal assignments, failing grades will stay in the grade book. These are 20% of the grade and will not be made up. Progressive grading applies to all testing. These formal grades will be made up through the cumulative testing. After ample opportunities to make up grades on tests, extra tutoring, and after parent contact and administration approval, formal grades may remain failing. Project grades will stand as is. There will be benchmark checks throughout each project to ensure students are completing the project correctly.
- Should a student continually refuse to make reasonable efforts to complete the requirements for earning a credit in the course, the student can receive a failing grade for the course. Prior to being required to repeat the course, the student will have an opportunity to participate in Credit Recovery as a way to recover the credit. Should the student be unwilling to complete the requirements of Credit Recovery, the student will ultimately fail the course.

Class Participation:

• It is expected for students to engage in meaningful participation while in the classroom. Throughout the semester, students will engage in a variety of learning techniques. Students must actively participate in any class activity assigned. Students should answer questions, offer their insights, and stay on task each day. This will lead students to mastery of the state standards. Specific expectations for each activity or assignment will be explained in detail, so the students will know what is expected of the.

Participation Examples (but are not limited to):

- o Daily in-class comments/input/dialogue
- o Small group activities
- $\circ \quad \textit{Partner Assignments}$
- o Preparation for class
- On task behaviors
- o Compliance and respect for class norms and procedures

Classroom Norms and Procedures:

- There are district and school wide norms and procedures that will be followed in the classroom as well. These are located in the student handbook and on the website.
- More specific classroom norms are as followed:
 - Respect yourself. Each student should expect nothing less than his or her best and behavior should reflect respect for self.
 - Respect the teacher. I am doing all I can to make each student successful. I will respect each student, but I expect the same in return.
 - Respect your fellow classmates. No behavior should interfere with learning or cause conflicts between students.
 - O Positive attitudes only! I accept that math is not everyone's favorite subject, but nothing can be accomplished with a negative attitude.
 - o Own it! Take responsibility for your own work and actions.

Project Examples:

1. "Relationship or Not: What's the Status?"

This project will use data gathering, analysis, scatter plots, linear regressions, and linear coefficients.

2. "I Need More Gas Money, Please!"

Students will investigate sequences and series by investigating allowance negotiation.

3. "How Do I Do That?"

In this project, students will exhibit writing and explaining skills in creating a "How-To" guide for a given concept/chapter.

4. "Polynomial Rollercoaster"

This project allows students to create a rollercoaster using polynomials.

^{***}This syllabus is subject to change at the discretion of the teacher.