## Algebra 2 (CP) - Syllabus

## SSISD Vision

Educating All Students to Their Fullest Potential

## SSISD Mission

The mission of the Sulphur Springs Independent School District is to provide students with the skills that will prepare them to adapt and excel in a fast-changing world, enabling them to lead productive lives. The district shares with parents and the community the responsibility of promoting high standards and expectations as we provide opportunities for all students within our diverse community to attain personal growth and to become lifelong learners.

## Course Description

## Prerequisite: Algebra I

This course is designed for students showing superior skills and advanced aptitude in mathematics. Pre AP Algebra 2 includes the knowledge and skills of Algebra 2 and goes beyond the regular course in both depth and content to prepare students for AP Calculus. Algebra 2 designed to develop process and problem solving skills and is a continuation and extension of concepts learned in Algebra 1. The study of functions includes the domain and range, function notation, inverses of functions, and graphs of parent functions. Attention is given to quadratic, square root, rational, exponential, and logarithmic functions and their applications. Included in Algebra II are knowledge and skills relating to the complex number system, conic sections and their graphs, data, analysis, and matrix algebra. The use of graphing calculators allows coordinate graphing, algebraic analysis, and complicated computation.

## Resources

CSCOPE: Algebra 2 and Textbook Algebra 2 (Larson/...)

## Course Requirements and Evaluation

Your six weeks grade will be determined in the following manner. $50 \%$ will be major grades such as Unit Exams and/or projects. The remaining $50 \%$ will be daily grades including but not limited to participation, completion of daily assignments, and daily quizzes.

## Grading Scale

90-100 A
80-89 B
70-79 C
69 or below $F$

## Course Knowledge and Skills

Although we are not obligated by the state to have an Algebra 2 STAAR End of Course test we will be required to take district-wide assessments throughout the year. You can find a list of Assessed Curriculum for our course on the TEA website. A link for Algebra 2 Assessed Curriculum follows:
http://www.tea.state.tx.us/WorkArea/linkit.aspx?Linkldentifier=id\&/temID=2147488336\&libID=2147488335.
A list of Texas Essential Knowledge and Skills may be found at the following website:

## http://ritter.tea.state.tx.us/rules/tac/chapter111/ch111c.pdf

STAAR Algebra II Blueprint

| Reporting Categories | Number of Standards |  | Number of Questions |  |
| :---: | :---: | :---: | :---: | :---: |
| Reporting Category 1: <br> Properties and Attributes of Functions | Readiness Standards | 3 | 8 |  |
|  | Supporting Standards | 2 |  |  |
|  | Total | 5 |  |  |
| Reporting Category 2: Representational Tools to Solve Problems | Readiness Standards | 3 | 8 |  |
|  | Supporting Standards | 2 |  |  |
|  | Total | 5 |  |  |
| Reporting Category 3: <br> Properties of Quadratic Functions | Readiness Standards | 4 | 12 |  |
|  | Supporting Standards | 3 |  |  |
|  | Total | 7 |  |  |
| Reporting Category 4: Representations of Quadratic Relations | Readiness Standards | 1 | 6 |  |
|  | Supporting Standards | 6 |  |  |
|  | Total | 7 |  |  |
| Reporting Category 5: <br> Properties of Square Root Functions | Readiness Standards | 1 | 5 |  |
|  | Supporting Standards | 6 |  |  |
|  | Total | 7 |  |  |
| Reporting Category 6: Properties of Rational Functions | Readiness Standards | 1 | 5 |  |
|  | Supporting Standards | 6 |  |  |
|  | Total | 7 |  |  |
| Reporting Category 7: <br> Properties of Exponential and Logarithmic Functions | Readiness Standards | 2 | 6 |  |
|  | Supporting Standards | 4 |  |  |
|  | Total | 6 |  |  |
| Readiness Standards | Total Number of Standards | 15 | 60\%-65\% | 30-33 |
| Supporting Standards | Total Number of Standards | 29 | 35\%-40\% | 17-20 |
| Total Number of Questions on Test |  |  | 45 Multiple Choice 5 Griddable 50 Total |  |

Texas Education Agency
Student Assessment Division
Fall 2010

## Course Policies

CLASSROOM EXPECTATIONS $\left(\mathrm{P}^{5}\right)$ :

1. PROMPT- Please sit in your assigned seat or area BEFORE the tardy bell rings. Then begin warm-up assignment.
2. PREPARED- Please enter our room in dress code with ALL class supplies daily. Place completed assignments in the designated area.
3. POLITE- At all times, please respect yourself, your classmates, and your teacher. Please listen attentively when others are speaking.
4. PARTICIPATE- ASK QUESTIONS! ANSWER QUESTIONS!

At the appropriate times, please share relevant ideas, help your classmates, analyze and discuss concepts and problem solving procedures and methods.
5. PRACTICE- Please spend 15 to 35 minutes DAILY completing homework, studying, reading notes and other supplemental materials.

CONSEQUENCES:
$1^{\text {ST }}$ Offense: Verbal Warning
$2^{\text {nd }}$ Offense: Detention
$3^{\text {rd }}$ Offense: Detention/Parent Contact
$4^{\text {th }}$ Offense: Referral to Principal's Office/Parent Contact
Severe Clause: Referral to Office/Parent Contact

METHODS OF INSTRUCTION: Assignments and exercises, lectures and outlines, demonstrations, discovery exercises, unit evaluations, reading, group activities, board work.

## ATTENDANCE AND TARDIES:

The Texas Education Code states "to receive credit for a class, a student is required to attend school for at least 90 percent of the days the class is offered (Section 25.092, Texas Education Code)." http://www.tea.state.tx.us. Attendance and punctuality are essential for your success in this course. Please attend class daily for your benefit. Persons entering class after the passing period will be marked tardy. Arriving to class 15 or more minutes late is considered an absence.

MATERIALS NEEDED: 3-ringed notebook and 3 dividers, paper, Graphing Calculator (optional but recommended TI 84 or equivalent), 4-AAA batteries, graph paper, and writing utensils.

PAPER HEADING


## CLASSWORK/HOMEWORK

We will cover the required material and incorporate daily review of basic math skills. Any assignment not turned in at the designated time will be marked late. You may turn in homework ONE day late for a maximum grade of 70 . Please remember, if you have trouble with an assignment it is your responsibility to attend tutorials to receive the help you need.

## PROVE YOUR ANSWERS

$>$ On all assignments, quizzes and tests
> Write the problem
> Show intermediate steps
> Identify your answer with proper units/sentence
> Box or Highlight your answer
> Check your work
> You may have a quiz at any time.

## TESTS/PROJECTS

> Test dates will be posted and announced in class.

## MAKE-UP WORK

> Please pick up absent work from absent bin before class begins the day you return.
> If you are absent one day, you have two days to make up the assignment(s).
> If you are absent two days, you have four days to make up the assignment(s).
$>$ Missed tests will be completed in tutorials within one week of absence.

## RETESTING

> Tests scores below $70 \%$ will be corrected DURING TUTORIALS.
> Retests will be retaken during tutorials within one week of the test.
> You may receive a MAXIMUM grade of 70 on the retest.
> Student who score below their desired goal may retake for a maximum grade of $90 \%$ during tutorials.

## TUTORIALS

Tutoring is before school 7:40-7:55 am every school day except Thursdays. Please sign in and out during tutorials.

## CALCULATOR USAGE

$>$ Using a calculator is a privilege not a right.
> Alvin High School will provide you with a calculator for your use in the classroom.
> Your assigned calculator is YOUR responsibility during the period.
> Batteries may be removed only when replacement is necessary.
> If you notice ANYTHING wrong with your calculator, it is YOUR responsibility to bring it to my attention AT THE BEGINNING OF THE PERIOD; otherwise, YOU will be responsible for the damage and replacement of the calculator. The replacement cost is $\$ 125$.

CELL PHONES \& ELECTRONIC DEVICES: Cell phones \& other electronic devices should be turned off and put away during class.

ACADEMIC INTEGRITY - By taking this course, the student declares that he/she will be the author of ALL work submitted for the course. Allowing another individual to complete assignments constitutes fraud and academic dishonesty. Should such behavior come to the attention of the instructor, the student will receive a 0 for the assignment.

## Office Hours

My conference period at the high school is $7^{\text {th }}$ period from 2:43 pm to $3: 30 \mathrm{pm}$.

## Year at a Glance

| First Semester | Second Semester |
| :---: | :---: |
| $1^{\text {th }}$ Six Weelss (27 days) | $4^{\text {th }}$ Sx Weels |
| Unit 01: Introductionto Functions (6 days - suggested pacing) <br> Readiness Standards - 2A.1A, 2A.1B <br> Syp orting Standards - 2A.4A <br> Unit 02: Properties and Attributes of Functions (21 days suggestedpacing) <br> Readiness Standards - 2A.1A, 2A.1B, 2A.4B <br> Smporting Standards - 2A.4A, 2A.4C, 2A. $7 \mathrm{~B}, 2 \mathrm{~A} .9 \mathrm{~A}, 2 \mathrm{~A} .9 \mathrm{G}$, 2A.10A, 2A.11B | Unit 06: Square Root Funtions (6 days - suggestedpacing) <br> Readiness Standards - 2 A 9 F <br> Supporting Standards -2 A. $9 \mathrm{~A}, 2 \mathrm{~A} .9 \mathrm{~B}, 2 \mathrm{~A} .9 \mathrm{C}, 2 \mathrm{~A} .9 \mathrm{D}, 2 \mathrm{~A} .9 \mathrm{E}$, 2A 9G <br> Unì 07: Rational Functions, Equations, And Inequalities (17 <br> days - sugzested pacing) <br> Readiness Standards -2 A .10 F <br> Supporting Standards -2 A. 10 A. $2 \mathrm{~A} .10 \mathrm{~B}, 2 \mathrm{~A} .10 \mathrm{C}, 2 \mathrm{~A} .10 \mathrm{D}$, 2A.10E,2A.10G <br> Unït 08: Exponential and Logarimmic Functions, Equations, and Inequalities (5 days - suggested pacing) <br> Readiness Standards - 2A.11F <br> Supporting Standards -2A.11B,2A. 11 C, 2A.11D, 2A.11E |
| $2^{\text {nd }}$ S'x Weels (25 days) | $5^{\text {th }} \mathbf{S} \mathbf{x}$ W Weels |
| Unit 03: Linear Functions, Solving Equations and Inequalities <br> ( 14 days - suggestedpacing) <br> Readivess Standards -2A.1A, 2A.1.B, 2A.4 B <br> 3pporting Standards - 2A. $2 \mathrm{~A}, 2 \mathrm{~A} .4 \mathrm{~A}$ <br> Check Point <br> Unit 04: Systems of Linear Equations (10 days - suggested <br> pacing) <br> Readivess Standards - 2A.3.A, 2A.3.B, 2A3.C <br> SYp orting Standards - 2A. 2 A | Unit 08: Exponetial and Logarifhmic Functions, Equations, and Inequalities, ( 14 days - suggested pac ing) cortimued <br> Unit 9: Conic Sections (9 days - suggested pacing) <br> Readiness Standards - None <br> Supporting Standards $-2 \mathrm{~A} .5 \mathrm{~A}, 2 \mathrm{~A} .5 \mathrm{~B}, 2 \mathrm{~A} .5 \mathrm{C}, 2 \mathrm{~A} .5 \mathrm{D}, 2 \mathrm{~A} .5 \mathrm{E}$ <br> Chedk Point (Semester Final) <br> Unit 10: Combined Systems ( 10 days - saggestedpacing) <br> Readiness Standards $-2 \mathrm{~A} .3 \mathrm{~A}, 2 \mathrm{~A} .3 \mathrm{~B}, 2 \mathrm{~A} .3 \mathrm{C}$ <br> Supporting Standards -None |
| $3^{\text {r }}$ S'x Weels | $6^{\text {th }}$ Sx Weels |
| Unit 04: Systems of Linear Equations (10 days - sugze sted pacinge contimued <br> Unit 05: Quadratic Functions, Equations, and Inequalities (20 days - suggested pacing) <br> Readiness Standards - 2A. 6A, 2A.6B, 2A. 7A, 2A.8A, 2 A. $8 . D$ SYporting Standards - 2A. $2 \mathrm{~A}, 2 \mathrm{~A} .2 \mathrm{~B}, 2 \mathrm{~A} 6 \mathrm{C}, 2 \mathrm{~A} .7 \mathrm{~B}, 2 \mathrm{~A} .8 . \mathrm{B}$, 2A.8.C <br> Check Point (Semeter Final) | Unit 11: Tying it All Together ( 15 days - suggestedpacing) Readiness Standards $-2 \mathrm{~A} .1 \mathrm{~A}, 2 \mathrm{~A} .1 \mathrm{~B}, 2 \mathrm{~A} .3 \mathrm{~A}, 2 \mathrm{~A} .3 \mathrm{~B}, 2 \mathrm{~A} .3 \mathrm{C}$, $2 \mathrm{~A} .4 \mathrm{~B}, 2 \mathrm{~A} .6 \mathrm{~A}, 2 \mathrm{~A} .6 \mathrm{~B}, 2 \mathrm{~A} 8 \mathrm{~A}, 2 \mathrm{~A} .8 \mathrm{D}, 2 \mathrm{~A} 9 \mathrm{~F}, 2 \mathrm{~A} .10 \mathrm{~F}, 2 \mathrm{~A} .11 \mathrm{~F}$ Supporting Standards $-2 \mathrm{~A} .4 \mathrm{~A}, 2 \mathrm{~A} .8 \mathrm{C}, 2 \mathrm{~A} .9 \mathrm{~B}, 2 \mathrm{~A} .10 \mathrm{~B}$ <br> Agebra 2 Assessment <br> Unit 12: Exploring Applic ations of Functions (9 dsys suggested pacing) <br> Readiness Standards $-2 \mathrm{~A} .1 \mathrm{~A}, 2 \mathrm{~A} .1 \mathrm{~B}, 2 \mathrm{~A} .3 \mathrm{~A}, 2 \mathrm{~A} .3 \mathrm{~B}, 2 \mathrm{~A} 3 \mathrm{C}$, $2 \mathrm{~A} .4 \mathrm{~B}, 2 \mathrm{~A} .6 \mathrm{~A}, 2 \mathrm{~A} .6 \mathrm{~B}, 2 \mathrm{~A} .8 \mathrm{~A}, 2 \mathrm{~A} .8 \mathrm{D}, 2 \mathrm{~A} 9 \mathrm{~F}, 2 \mathrm{~A} .10 \mathrm{~F}, 2 \mathrm{~A} .11 \mathrm{~F}$ Supporting Standards $-2 \mathrm{~A} .2 \mathrm{~A}, 2 \mathrm{~A} .6 \mathrm{C}, 2 \mathrm{~A} .7 \mathrm{~B}, 2 \mathrm{~A} .9 \mathrm{~A}, 2 \mathrm{~A} 9 \mathrm{C}$, $2 \mathrm{~A} 9 \mathrm{D}, 2 \mathrm{~A} .9 \mathrm{E}, 2 \mathrm{~A} .10 \mathrm{~A}, 2 \mathrm{~A} .10 \mathrm{~B}, 2 \mathrm{~A} .10 \mathrm{C}, 2 \mathrm{~A} .10 \mathrm{D}, 2 \mathrm{~A} .10 \mathrm{E}$, $2 \mathrm{~A} .10 \mathrm{G}, 2 \mathrm{~A} .11 \mathrm{~A}, 2 \mathrm{~A} .11 \mathrm{C}, 2 \mathrm{~A} .11 \mathrm{D}, 2 \mathrm{~A} .11 \mathrm{E}$ <br> Chedk Point (Semester Final) |

THE ABOVE SCHEDULE, POLICIES, PROCEDURES, AND ASSIGNMENTS IN THIS COURSE ARE SUBJECT TO CHANGE IN THE EVENT OF EXTENUATING CIRCUMSTANCES.


SSHS BELL SCHEDULE:

REGULAR SCHEDULE

| $1^{\text {st }}$ PERIOD | $8: 00-8: 47$ |  |
| :--- | :---: | :---: |
| $2^{\text {nd }}$ PERIOD | $8: 52-9: 39$ |  |
| $3^{\text {rd }}$ PERIOD | $9: 44-10: 31$ |  |
| $4^{\text {th }}$ PERIOD | $10: 36-11: 24$ |  |
| $5^{\text {th }}$ PERIOD | $11: 24-12: 54$ |  |
| A LUNCH | $11: 24-11: 54$ |  |
| B LUNCH | $11: 54-12: 24$ |  |
| C LUNCH | $12: 24-12: 54$ |  |
| $6^{\text {th }}$ PERIOD | $12: 59-1: 46$ |  |
| $7^{\text {th }}$ PERIOD | $2: 43-3: 38$ |  |
| $8^{\text {th }}$ PERIOD |  |  |

PEP RALLY SCHEDULE

| $1^{\text {st }}$ PERIOD | $8: 00-8: 43$ |
| :--- | ---: |
| $2^{\text {nd }}$ PERIOD | $8: 48-9: 31$ |
| $3^{\text {rd }}$ PERIOD | $9: 36-10: 19$ |
| $4^{\text {th }}$ PERIOD | $10: 24-11: 07$ |
| $5^{\text {th }}$ PERIOD | $11: 07-12: 37$ |
| A LUNCH | $11: 07-11: 37$ |
| B LUNCH | $11: 37-12: 07$ |
| C LUNCH | $12: 07-12: 37$ |
| $6^{\text {th }}$ PERIOD | $1: 30-2: 13$ |
| $7^{\text {th }}$ PERIOD | $2: 18-3: 01$ |
| $8^{\text {th }}$ PERIOD | $3: 05-3: 30$ |

## Student, Parent, Teacher Contract

STUDENT: I have read the rules, procedures, classroom discipine plan and calculator usage. I understand them. I will honor this contract during our time together for Algebra 2.

Please PRINT name here
Please SIGN name here
PARENT: My child and I have discussed this contract. I undersand it and will support it.

Please PRINT name here
Please SIGN name here

PARENT: I give my child permission to view a film in class that the teacher has chosen to show. I acknowledge this film may possibly be rated PG-13 or PG and that the teacher will use discretion in selecting a film appropriate for the students. I understand this film will pertain to the subject matter of the class.

Please PRINT name here

Parent Daytime Phone (_ ) Parent Evening Phone ( $\qquad$ )
Please SIGN name here
e-mail address: Please print clearly $\qquad$
Additional information/Comments $\qquad$

TEACHER: I will be fair and consistent with your student and all students in his/her class.
Mr. Gerald Grafton
Please PRINT name here
Please SIGN name here

Please return this page to Mr. Grafton or before Friday, August 30, 2013

