



# Deer Valley Unified School District No. 97

SANDRA DAY O'CONNOR HIGH SCHOOL

25250 N. 35<sup>th</sup> Ave, Phoenix, AZ, 85083

623-445-7100

[sdohs.dvusd.org](http://sdohs.dvusd.org)



**Course:** Algebra 3-4  
**Teacher:** Cheryl Bremser  
**Room:** 602

**E-mail:** [cheryl.bremser@dvusd.org](mailto:cheryl.bremser@dvusd.org)  
**Voice Mail:** 623-445-7245

**TUTORING: MON,TUES,WED,THURS 2:15 - 3:00 pm**

## **Math Department Mission Statement:**

---

The SDOHS math department will ensure that all students will increase their competency in math through quality instruction and collaboration.

## **Course Objectives:**

---

1. Make sense of problems and persevere in solving them
2. Understand what variables represent and how they can be used to model equations and solve problems
3. Justify conclusions and critique the work of others
4. Use appropriate tools strategically and attend to precision
5. Use structure to identify patterns

## **Course Description:**

---

This course is designed to engage students in the practice of mathematics by developing an understanding of mathematical relationships, functions, and models, both in and out of context, with an emphasis on problem solving. Algebraic topics will be developed and valued conceptually leading to procedural fluency. Students will utilize concepts, skills, representations, and techniques that address many different types of functions, including quadratic, polynomial, rational, exponential, logarithmic, and trigonometric functions. This course also uses statistical models to analyze relationships represented by data.

### **Semester 1:**

Unit 1: Functions  
Unit 2: Quadratic Functions, Equations & Relations  
Unit 3: Polynomial Functions, Expressions, & Equations  
Unit 4: Rational Functions, Expressions, & Equations

### **Semester 2:**

Unit 5: Radical Functions, Expressions & Equations  
Unit 6: Exponential & Logarithmic Functions & Equations  
Unit 7: Trigonometric Functions  
Unit 8: Probability  
Unit 9: Statistics

## **Suggested Materials for students' academic success:**

---

- \* Calculator TI 84 strongly recommended as the preferred model (TI 83 acceptable as well)  
\*\*\* needed for ACT exam
  - \* Two (2) dry erase white board markers for use in class/dry eraser
  - \* Pencils (mechanical preferred)
  - \* Box of Kleenex for class use
  - \* Folder or binder to hold notes
-

## Grading Policy:

O'Connor High School believes that authentic grading accurately measures and reflects a student's performance based upon mastery of the standards.

O'Connor High School implements a research-based, unified grading and reporting policy that is focused on a standards-based mindset in which all grades are proficiency-based that effectively communicate what students know and can do, so students can focus on growth and learning. Grades will have consistent meaning throughout the system and be based upon grade level standards.

In order to increase grading consistency, accuracy, equity, and focus on learning, O'Connor High School strives to employ the following tenets:

- A student's grade should reflect academic learning and should never be used as a punitive tool.
- Grades are for reporting the status of academic learning, not behavioral conduct.
- The primary purpose of assessment and grading is to provide detailed feedback to inform student learning.
- Learning is a process that takes place over time and at different speeds for different students.
- A coordinated assessment and grading system clarifies the expectations for all students and maximizes academic opportunities.

Grades are cumulative for each semester. The grade book categories are as follows:

**Assessments .....80%**  
**Homework/Quizzes.....20%**

No extra credit will be given.  
Final grades will not be rounded.

Students in 3rd through 12th grades will receive marks for their **overall performance** in each course of study using the following letter grade scale. Overall course grades for students in grades 3-12 will be calculated from the average of the student's assignment scores\* (assessments, coursework).

A = 90-100%

B = 80-89%

C = 70-79%

D = 60-69%

F = 0-59%

*Grades of "D" and above are passing marks. A course grade of "F" indicates that the student has failed the course. For 9th-12th grade levels, no course credit will be awarded for a failing course grade.*

## Essential Learning Standards for the Course: Fall Semester

<b>Unit 1</b>	<p style="text-align: center;"><b>Functions</b></p> <p>F-IF.B.4 - Interpret key features of functions.</p> <p>F-IF.B.6 - Calculate average rate of change</p> <p>F-BF.B.3 - Transformations of a graph.</p> <p>S-ID.B.6 - Fit and use a function fitted to data to solve problems in the context.</p>
<b>Unit 2</b>	<p style="text-align: center;"><b>Quadratics</b></p> <p>A-REI.B.4a - Solving Quadratic Equations by Square Roots and Factoring.</p> <p>A-REI.B.4b - Solving Quadratic Equations by Completing the Square and Quadratic Formula.</p> <p>N-CN.C.7 - Solving quadratic equations with complex solutions</p> <p>REI.C.7* - Solve systems of equations</p>
<b>Unit 3</b>	<p style="text-align: center;"><b>Polynomials</b></p> <p>F-BF.A.1b - Combine polynomials using function composition.</p> <p>A2.A-APR.D - Rewrite rational expressions - division of polynomials</p> <p>A-APR.B.3 - Identify zeros of polynomials, and use them to construct a rough graph.</p> <p>F-IF.C.7 - Graph polynomial functions and show key features.</p>

<b>Unit 4</b>	<b>Rationals</b>
	A-SSE.A.2 - Rewriting rational expressions
	A-REI.A.2 - Solve rational and radical equations
	A-CED.A.1 - Create equations/inequalities and use to solve problems
	F-IF.C.7* - Graph rational functions expressed symbolically and show key features.

## Spring Semester

<b>Unit 5</b>	<b>Radicals</b>
	A2.N-RN.A.2 – rewrite radical expressions and rational exponents
	A2.A-REI.A.2 – solve radical equations
	A2.F-IF.C.7 – graph & key features radical functions
	A2.F-BF.B.3 – radical functions transformations
	A2.F-BF.B.4 – Find inverse functions
<b>Unit 6</b>	<b>Exponential &amp; Logarithmic</b>
	A2.F-BF.A.2 – arithmetic & geometric sequences
	A2.F-BF.B.3 – transformations of graphs
	A2.F-BF.B.4 – inverse functions
	A2.A-SSE.B.4 – geometric series calculate mortgage payments
	A2.S-ID.B.6 – exponential regression
	A2.F-IF.C.8 – properties of exponents & growth or decay
	A2.F-LE.A.4 – evaluate the logs
	A2.F-IF.B.4 – graph & key features
<b>Unit 7</b>	<b>Trigonometric</b>
	A2.F-TF.B.5 – Create & interpret trig functions
	A2.F-IF.B.4 - Graph & interpret key features
	A2.F-BF.B.3 – Transformations of graphs
	A2.F-IF.C.9 – Compare properties of two functions represented in different ways
<b>Unit 8</b>	<b>Probability</b>
	A2.S-CP.A.3 – understand conditional probability of A given B as $P(A \text{ and } B)/P(B)$
	A2.S-CP.B.6 – Bayes Rule to find $P(A)$ given B and interpret answer in terms of model
	A2.S-CP.B.7 – Apply Addition Rule $P(A \text{ or } B) = P(A)+P(B) - P(A \text{ and } B)$ & interpret in terms of model
	A2.S-CP.B.8 – Apply Multiplication Rule $P(A \text{ and } B) = P(A) P(B A)$ and interpret in terms of model

Unit	Statistics
9	<p><b>A2.S-IC.A.1</b> – understand statistics as a process of making inferences about population parameters based on random sample</p> <p><b>A2.S-IC.B.3</b> – recognize purposes of and differences between designed experiments, sample surveys and observational studies</p> <p><b>A2.S-IC.B.4</b> – Use data from sample survey to estimate a population mean or proportion</p> <p><b>A2.S-ID.A.4</b> – Use mean and standard deviation to fit to a normal curve &amp; use properties of normal distribution to estimate population percentages</p>

---

Each level of the grade scale signifies a specific level of learning proficiency. Teachers assess student performance on individual standards. Teachers will enter scores for individual standards using the above A,B,C,D,F grade scale.

The grades entered in the gradebook will be letters that directly correlate with the descriptor. The *overall* grade will be an average of the individual standard scores and will round up.

### **Powerschools Access**

---

The Powerschools site allows parents/guardians and students to access the student's grades, attendance, and other information. If you need your access information, please stop by the front desk during business hours. You will need a photo I.D. The web address is [ps.dvusd.org/public](https://ps.dvusd.org/public)

### **Homework Procedures**

---

The practice assignments in Math XL will be recorded within Power Schools, and they **will be calculated into their overall grade**. Students will receive their assignments within Math XL the first day a Standard is introduced, and they will have several days to work on the 10 - 20 problems throughout the week to practice. Homework will be weighted at 20% of the students' overall grade.

### **Large Language Models (LLMs), such as ChatGPT**

---

DVUSD has determined that the use of Large Language Models (LLMs), such as ChatGPT, are prohibited unless clearly specified by your teacher. Specific guidelines will be provided in the assignment details. If you are unsure if the tool or website you are using is an LLM or if it is permitted on a specific assignment, please contact your teacher before submitting your work.

### **Assessment Procedures**

---

You must take tests the day they are given. An absence the day before the test will not excuse you from the test. If a student is absent on the day of the test, the student is required to take the test on the day of the return. It is the student's responsibility to make the teacher aware of an absence that will interfere with test dates. Failure to do so will result in a zero on the exam. Please contact me if there are extenuating circumstances. Tests will be weighted at 80% of the students' overall grade.

### **Make Up Work Procedure**

---

When a student is absent from school, the student will be provided the opportunity to make up work in order to close learning gaps from time away from school. The teacher will provide access to the student's assignment(s) and any hand-out or materials necessary for accomplishment of such assignment, allowing a minimum make-up period of one (1) day for each day absent.

Students are responsible for checking CANVAS to find out what was covered during their absence and communicating with the teacher to develop a plan to make-up lost learning/assignments. Students are encouraged to communicate electronically with the teacher during the absence.

Students who miss school work because of unexcused absences or suspensions will be given the opportunity to make-up missed work for credit. The teacher may assign such make-up work as necessary to ensure academic progress, **not as a punitive measure.**

---

## Late Work Procedure

Homework is an opportunity for students to practice the new skills they are learning. The assignments build on one another, and students need to be practicing as we move through the curriculum. Homework provides the necessary practice for students to be prepared for their assessments, so it is necessary for the assignments to be completed **prior** to an assessment. Assignments in Math XL will remain open for the duration of the unit. Once the summative assessment has occurred, the assignments will be locked. The students' grades on those assignments will also lock in place. No late homework will be accepted once the unit assessment has been administered.

## Long-Term Project Procedure

There is an important distinction between daily/formative assignments and long-term/summative projects. Make-up policies regarding long-term/summative projects are based on the timeframe of the student's absence and the requirements of the long-term project. It is the expectation that students submit long-term projects on the day they are due. **Students should self-advocate for assistance if they need extensions.**

---

## Retake Policy

There is no retake opportunity on quizzes, as students will be given another opportunity to show proficiency on the standards on the unit assessments. Students will be allowed to retake unit assessments. This retake opportunity must occur within 5 days of being graded. To be eligible for a unit test retake, students must have a minimum of a 90% average on their MathXL assignments for that unit as of the test day, low quiz scores (any score lower than 70%) must be corrected during an assigned Talon Time) and 3 or fewer tardies in class. Past locked homework assignments will not be unlocked in order to improve homework percentages once test day has occurred. This means students need to earn the required 90% or higher prior to the unit test day. The higher score will be recorded.

---

## Electronic Device Use

Technology (cell phones, iPods, hand-held devices, etc.) use in the classroom is intended to **enhance** the learning environment for all students; however, any use of technology that substantially degrades the learning environment, promotes dishonesty or illegal activities, is prohibited. If the instructor determines that the use of technology is a distraction to the learning process, either of the student using the technology or to those around him/her, the student may, at the discretion of the teacher, be asked to discontinue the use of technology in the classroom.

---

## Personal Electronic Device Use:

Personal Electronic Devices include cell phones, iPods, other mp3 players and similar technology devices **used for entertainment and communication/social media.** Students are expected to place their phone in the teacher's assigned cell phone location prior to the start of class.

---

## Use of Electronic Devices to Facilitate Learning:

Sandra Day O'Connor High School utilizes iPads **as a learning tool** in the classroom. The technology tools are added to the classroom for learning, and the classroom teacher will inform students as to when they may use their device and for which purposes. Students must adhere to their teacher's guidelines for use and appropriate times for use. Any student who violates the teacher's guidelines will be subject to disciplinary action.

*Please note- students may not access their personal devices, whether for entertainment or learning, if the teacher has stated that the classroom activities at that time do not warrant use. For example, during testing or assessments.*

## **Adherence to the O'Connor Academic Integrity Code:**

---

All students enrolled in Algebra 3-4 will adhere to the framework and guidelines set forth in the O'Connor High School Academic Integrity Code. Cheating and Plagiarism will not be tolerated. **The purpose of this code is to promote a positive learning environment for all involved.** As humans, we will make mistakes as we grow. It is understood that we can learn from those mistakes and become better individuals in the future. Any student who violates this code will be referred to the Students Rights and Responsibilities handbook and assignment of appropriate consequences.

## **Plagiarism and Cheating**

---

**Cheating:** In cheating, a student is taking the work of another, on any assignment, and claiming it as his/her own. At SDOHS cheating includes but is not limited to:

- \* Copying and/or offering homework verbally, in written form, or by electronic means from/to another student.
- \* Copying and/or offering questions and/or answers on tests or quizzes verbally, in written form, or by electronic means from/to another student.
- \* Pressuring other students to copy and/or offer homework, answers and/or questions on tests or quizzes verbally, in written form or by electronic means.
- \* Bringing in and using unauthorized information during class time, including information stored in any electronic device.
- \* Offering or receiving information under circumstances in which information is not to be shared.
- \* Having anyone, including parents or tutors, complete assignments and submitting the work as one's own.
- \* Presenting collaborative work as independent work and independent work as collaborative. (In group work, one person should not and will not bear the burden for the entire group assignment.)
- \* Copying answers from answer guides in texts.
- \* Fabricating data, information, or sources. Presenting made up material as authentic.

**Plagiarism:** The act of plagiarism may include direct copying, but it may also be more complex than verbatim repetition. A student, in preparing a project for a class, will have plagiarized if he/she has taken information from sources without citing the sources that have been used. Plagiarized material may appear in a student's paper as word-for-word copying, a summation, or a paraphrase of another's ideas. A student has plagiarized whether the material from another source has been taken in whole or in part. In effect, by not naming the source, the student is claiming the work of another as his/hers. At SDOHS plagiarism includes but is not limited to:

- \* Submitting images and/or documents in whole or in part from the Internet without citation of the source(s).
- \* Copying another's work.
- \* Using another's ideas without proper citations.
- \* Incorporating portions of another's writing within the context of your own work.
- \* Failing to acknowledge a source of information.
- \* Using "unique" phrases without citations.
- \* Using graphics, charts, diagrams, or illustrations without citations.
- \* Using a translator (either in-person or on-line) without proper citations

Plagiarism and/or Cheating will result in disciplinary actions and a 0%, with no option to redo/retake. - **no exceptions.**

## **Loss of Credit Due to Absences**

---

Upon reaching 5 unexcused absences or a combination of 12 unexcused and/or excused absences, a student may **lose credit** in any given class.

Any student may be placed on an Attendance Contract upon accumulating multiple excused and unexcused absences. Any student with excessive absences may:

1. Lose credit in one or more classes.
2. Lose parking privileges.

The Deer Valley Unified School District does not discriminate on the basis of race, color, national origin, sex, disability, or age in its programs and activities. For any inquiries regarding nondiscrimination, policies contact the Superintendent's Department, 20402 N. 15th Avenue, Phoenix, AZ 85027. 623.445.5000.

## **How to Get Help:**

---

If you feel confused, **PLEASE ASK QUESTIONS!** My goal is to help you succeed. Tutoring will be held after school unless otherwise noted, in Mrs. Bridges' classroom, Room 616. This will be in addition to the tutoring offered during Talon Time twice a week during the school day.

# Algebra 3-4 Mrs. Bremser's Syllabus Signature Page

Please return this portion by **August 4th, 2023**.

Student Name \_\_\_\_\_ Class Period: 1 2 3 6 7

I have read the "Course Syllabus" for Algebra 3-4 for the 2023- 2024 school year and understand the expectations of Mrs. Bremser as well as the consequences if such expectations are not followed.

Student Signature: \_\_\_\_\_ Date: \_\_\_\_\_

I have read my child's "Course Syllabus" for Algebra 3-4, and I understand the expectations of Mrs. Bridges as well as the consequences if such expectations are not followed. Parents/Guardians are encouraged to check my school website, Canvas, and Power Schools to keep up to speed on our class. **Additionally, I understand the importance of a TI-84 calculator in this class.**

Parent/Guardian Signature: \_\_\_\_\_

Home Phone: \_\_\_\_\_ Cell/Work Phone: \_\_\_\_\_

Email: \_\_\_\_\_

I prefer to be reached by:  Home Phone  Cell Phone  E-mail