

University City High School

# Honors Algebra 2 with Statistics

Syllabus 2020-2021



## Instructors:

Amy Titler

[atitler@ucityschools.org](mailto:atitler@ucityschools.org)

Kristen Vosevich

[kvosevich@ucityschools.org](mailto:kvosevich@ucityschools.org)

## Course Description:

This course reviews fundamental concepts and skills of high school algebra and applies them to topics of second year algebra. The content stresses manipulation of algebraic expressions, solution of algebraic statements, and classification of algebraic relations and functions. This course is a prerequisite for college bound students.

## Textbook:

*Algebra 2*, Common Core Edition from The McGraw Hill Companies, 2014. Online access available.

## Course Expectations:

Students will be expected to have their note packet (provided) and their Chromebook to attend class during their assigned times. Completing assignments, attending scheduled zoom classes, and seeking help when needed are essential components of successfully mastering the rigorous contents of Algebra 2.

## Calculators:

Students will not be provided with a calculator during distance learning. However, we will use Desmos which will have a Graphing and Scientific calculator for student use. Students can access these calculators on [www.desmos.com](http://www.desmos.com) or download the app from the Google Play Store (Android) or iOS App Store (Apple) for free.

## Formative & Summative Assessments:

Classwork will be given during each live Zoom meeting. All homework will be assigned on ALEKS. Homework will be assigned at the beginning of each week, and students will be given multiple attempts to master the material. Due dates may vary. Extensions may be given, but will be determined case by case. All classwork and homework need to be completed before the Summative is assigned at the end of the unit. Classwork and homework will be credited in the formative category worth 30% of the grade. Unit exams, projects, and planned quizzes will be credited in the summative category worth 70% of the grade. There will be a CUMULATIVE final exam at the end of the semester.

## Grading Scale:

90 - 100	A
80 - 89	B
70 - 79	C
60 - 69	CR (credit)
Below 60	NC (no credit)

## Grade Components:

### Formative Assessments

- Classwork (10 points each)
- Homework (10 points each)

### Summative Assessments

- Planned Quizzes (50 points each)
- Unit Exams (100 points each)
- Final Exam (200 points)

## Chromebooks:

Due to beginning the school year following a distance learning model, it is imperative that students have their Chromebooks in working order. All classwork and homework assignments, quizzes and exams will be given electronically. If an issue arises with your chromebook, or it needs to be repaired or serviced, please contact [wo@ucityschools.org](mailto:wo@ucityschools.org) or (314) 290 - 4014.

## Charges for Technology Devices and Items:

Lost Device	\$300
Lost Charger	\$40
Damage to Device	\$30 - \$150

*Please be advised, all district devices use a filter to limit inappropriate content as well as a program called GoGuardian that allows teachers to view students' computers.*

## Additional Math Help:

ALEKS comes with online help tutorials, example videos, and link to book reference. All lesson videos will be posted in Google Classroom to refer back to. Teachers are available outside of "school hours" for virtual tutoring. Please make contact with any of the teachers listed at the beginning of this document via email or Google Classroom.

## Expectations and Procedures:

1. Be respectful of each other and follow all district and school distance learning guidelines.
2. Be on time (logged in and ready to begin). District tardy policy will be followed.
3. Be prepared with all materials.
4. Because electronic devices such as cell phones and iPods have the capacity to store formulas and share test questions and answers with friends: **assessments will be designed to accommodate technology availability. While collaboration is encouraged, there will be consequences for academic dishonesty when "collaboration" crosses into academic dishonesty.** Thank you for helping me to make sure students understand the importance of this rule.
5. **DO YOUR BEST!**

*\*\*\*Academic Dishonesty:* defined as plagiarism, cheating on tests, copying all or part of another student's assignments or papers, and/or forging parent or teacher's signature on document. Any assignment meeting this criterion will result in an automatic zero.

*\*\*\*Electronic Devices:* while it is important to recognize that this may be a valuable tool to the learning process, it is also a great distraction therefore usage will not be permitted at UCHS.

# Algebra 2 with Statistics Course Outline

## ★ Unit 1: Absolute Value Functions

*A2.REI.B.1:* Create and solve systems of equations that may include non-linear equations and inequalities.

*A2.BF.A.3:* Describe the effects of transformations algebraically and graphically, creating vertical and horizontal translations, vertical and horizontal reflections and dilations (expansions/compressions) for linear, quadratic, cubic, square and cube root, absolute value, exponential and logarithmic functions.

**Unit 1 Summative: September 22th**

## ★ Unit 2: Quadratic Functions

*A2.BF.A.3:* Describe the effects of transformations algebraically and graphically, creating vertical and horizontal translations, vertical and horizontal reflections and dilations (expansions/compressions) for linear, quadratic, cubic, square and cube root, absolute value, exponential and logarithmic functions.

**Unit 2 Summative: October 15nd or 16th**

## ★ Unit 3: Polynomial Functions

*A2.APR.A:* Perform operations on polynomials and rational expressions.

**Unit 3 Summative: November 9th or 10th**

## ★ Unit 4: Rational Functions

*A2.APR.A:* Perform operations on polynomials and rational expressions.

**Unit 4 Summative: December 17th or 18th**

## ★ Unit 5: Radical Functions & Roots

*A2.BF.A.3:* Describe the effects of transformations algebraically and graphically, creating vertical and horizontal translations, vertical and horizontal reflections and dilations (expansions/compressions) for linear, quadratic, cubic, square and cube root, absolute value, exponential and logarithmic functions.

*A2.NQ.A:* Extend and use the relationship between rational exponents and radicals.

**Unit 5 Summative: February 4th or 5th**

## ★ Unit 6: Exponential & Logarithmic Functions

*A2.BF.A.3:* Describe the effects of transformations algebraically and graphically, creating vertical and horizontal translations, vertical and horizontal reflections and dilations

(expansions/compressions) for linear, quadratic, cubic, square and cube root, absolute value, exponential and logarithmic functions.

**Unit 6 Summative: March 11th or 12th**

**★ Unit 7: One Variable Data**

*A2.DS.B1:* Know and use the characteristics of normally distributed data sets; predict what percentage of the data will be above or below a given value that is a multiple of standard deviations above or below the mean.

*A2.DS.B2:* Fit a data set to a distribution using its mean and standard deviation to determine whether the data is approximately normally distributed.

**Unit 7 Summative: April 8th or 9th**

**★ Unit 8: Collecting & Interpreting Data**

*A2.DS.A:* Make inferences and justify conclusions.

*A2.DS.A:* Describe and explain the purposes, relationship to randomization and differences among sample surveys, experiments and observational studies.

**Unit 7 Summative: May 20th or 21st**

\*\*The schedule above is subject to change based on students' needs.