

Algebra 2A Syllabus & Course Information, SEHS 2018-19

Teacher: Peter Wiebe wiebe_p@4j.lane.edu Room 710 Office Hours: <ul style="list-style-type: none">7:50 – 8:25 Tuesday – Friday, or by appt.	<u>Textbook:</u> CPM Core Connections Algebra 2, vol 1 <u>eBook:</u> http://ebooks.cpm.org <ul style="list-style-type: none">PIN: K79NG
<u>Interactive Help & Resources:</u> <ul style="list-style-type: none">StudentVUE and ParentVUEClass Website/Assignment Calendar:<ul style="list-style-type: none">http://tinyurl.com/sehs-alg2-a	<u>Homework Reminders:</u> <ul style="list-style-type: none">Text messages: Send @sehs-alg2a to 81010

Algebra 2 is a two trimester course which covers equations, graphs and situations involving a variety of functions including linear, quadratic, exponential, rational, radical, inverse, logarithmic and trigonometric functions. We will look at arithmetic and geometric sequences and work with statistics. The course aligns with the Common Core Standards and has a problem solving focus to promote a deeper understanding of the mathematics. Students will have an opportunity to collaborate on investigations and are encouraged to share ideas and learn from each other.

Assessment & Grading Practices:

Based on overall, weighted average of individual categories: Classwork, homework, INB (30%); quizzes, tests, and final exam (70%). I do not round up.

A: 90.00-100.00%, B: 80.00-89.99%, C: 70.00-79.99%, D: 60.00-69.99%, F: Below 60%
Students will have multiple opportunities to show understanding & fluency. You are responsible for all material covered, assigned & assessed. Modifications & accommodations will be made for students with documented plans.

Please note 4j's revised "Procedures for Granting and Transferring Credit" in your Student/Parent Handbook.
This section includes important information on partial credit, incomplete policies, withdrawing from a class, and deadlines for schedule or grade option changes.

Attendance & Expectations: Plan ahead. Arrive prepared to stay & work all period. Regular attendance is essential for success, and possibly full credit. *After an absence, it is your responsibility to find out what you missed & make it up;* some activities cannot be made up & may impact learning. You are expected to actively participate with your assigned teams. Respect people, ideas, property & everyone's right to learn. Smartphones, tablets, & personal computers may be used at the teacher's discretion for class-specific purposes only.

Materials: Arrive to class on time & ready to work. Bring the following items every day:

- College-rule composition book for INB (provided at beginning of trimester)
- Notebook (composition or spiral bound, college-rule or quad-rule) dedicated for homework and classwork in this course
- Sharpened pencils with erasers
- Graphing calculator, Desmos app or TI 84 preferred.
- Your textbook (printed or digital) for this course
 - You are responsible for your textbook. The school requires you to pay for lost or stolen books (this one is \$75) before you get a replacement.
 - *If you are unable to obtain learning tools & materials, please let me know promptly & privately.*

Getting Help – Student Resources: You will collaborate extensively in cooperative study teams & receive support from your instructor in class. Options outside of class should supplement in-class learning.

- You can review the resources in your interactive notebook, binder, assignments & assessments.
- You can use support at cpm.org, khanacademy.org, or other sites.
- After school peer tutors are available until 4:00 Mondays through Thursdays in the school Library.
- An e-book of the text is online (see above). A parent guide with extra practice is available for free at cpm.org.
- I am available during *Office Hours* at the times listed above, or by appointment. These times may also be used to demonstrate proficiency.

Coursework: *Common Core State Standards* include skills, knowledge, & the mathematical practices used to learn them. Oregon requires all students to pass 3 years of math (Algebra & higher) and to pass a comprehensive test (called *Smarter Balanced*) or produce a work sample. To prepare to meet these graduation requirements, you will create an interactive notebook, take various types of assessments, and engage in team & individual activities. This curriculum repeatedly “spirals” through topics, so expect to develop proficiency over time, rather than to master concepts upon the first exposure. Your strong efforts in and outside of class are essential to success.

Please respond to the online survey below:

<p>Students:</p> <p>In lieu of signing and returning this syllabus to me, please take the online survey at the link below:</p> <p>https://tinyurl.com/studentsurvey-wiebe</p>	<p>Parent/Guardians:</p> <p>In lieu of signing and having your student return the syllabus to me, please take the online survey at the link below:</p> <p>https://tinyurl.com/pg-survey-wiebe</p>
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Successful Learning Behaviors

Team Norms

Success for the individual is inseparable from success for the team. Teaching & learning are mutually supportive activities; we all learn best when we teach one another.

- Keep all conversation within your team; keep any phone use for math only.
- Explain and justify your ideas; give statements and reasons.
- Helping your teammate does not mean giving answers. Help by giving hints and asking good questions.
- No one alone is as smart as all of us together. Do not leave anyone behind or let anyone work ahead. Your team is not done until everyone is done.

Whole-Class Discussion Norms

Success for the individual is interdependent with success for all. Teaching & learning are mutually supportive activities; we all learn best when we listen to one another.

- Raise your hand to pose questions & comments.
- Refer to your work & your other resources when composing questions & comments.
- When another person is addressing the class, refrain from side-talk, even on-topic talk.
- Offer to share your written work to support your verbal contributions.

Formal Assessment Norms

For an exam (daily quiz, or longer, comprehensive test), use the opportunity to demonstrate proficiency & fluency, & afford all others the same opportunity.

- Adhere to school policy on academic integrity.
- No sharing; use your own calculator, your own *INB*, pencil, etc. ***Keep phones off & away.***
- Maintain a quiet environment. Refrain from talking, & pencil-sharpening during the quiz.
- After turning in quiz, read silently, preview upcoming lesson, or review previous work; unless instructed otherwise, keep all other personal electronics off & away during quiz.

Algebra 2 Learning Targets

Target	“I can” Statement of Objective & CCSS Code
Alg201	I can interpret parts of, & use those parts to rewrite, an expression. A-SSE.a
Alg202	I can factor, complete the square, & use properties of exponents, to rewrite quadratic functions. A-SSE.b
Alg203	I can add, subtract & multiply polynomials. A-APR.a
Alg204	I can find zeros of polynomials. A-APR.b
Alg205	I can rewrite polynomials using long division. A-APR.c
Alg206	I can show & explain methods for solving equations & construct arguments defending the solutions, the number of solutions & the types of solutions, including extraneous ones. A-RE.IA
Alg207	I can solve linear & quadratic equations in one variable graphically & algebraically, including by completing the square. A-RE.IB and D
Alg208	I can represent & solve linear inequalities graphically & algebraically. A-RE.I
Alg209	I can graph functions to show intercepts, maxima & minima. F-IF.C
Alg210	I can demonstrate understanding of radian measure in the unit circle & determine the exact values of cosine, sine, & tangent for angles of multiples of $\pi/2$, $\pi/3$, $\pi/4$, and $\pi/6$. F-TF.a
Alg211	I can choose trigonometric functions to model situations with given amplitude, frequency & midline. F-TF.b
Alg212	I can create & use linear, exponential, quadratic & rational equations to solve problems; & use graphs, represent constraints & rearrange formulas. A-CED
Alg213	I can interpret, describe & sketch key features of graphs & tables (including domain) for linear, exponential & quadratic functions that model relationships between two quantities, including for given verbal descriptions of relationships. F-IF
Alg214	I can write an explicit expression & a recursive process to model a given context.
Alg215	I can write a function that describes a relationship between two quantities & identify the effect of transformations on the graph; & identify algebraic transformations shown on given graphs. F-BF.1a
Alg216	I can distinguish between situations that can be modeled with linear & exponential functions. F-LE
Alg217	I can find & interpret measures of central tendency & spread, including standard deviation. S-ID.A
Mth01	I can consistently & thoroughly complete & check assigned Review & Preview exercises.
Mth02	I can consistently & thoroughly make & maintain a neat & organized Interactive Notebook.
MP.1	I can make sense of problems and persevere in solving them. CCSS MP.1
MP.2	I can reason abstractly and quantitatively. CCSS MP.2
MP.3	I can construct viable arguments and critique the reasoning of others. CCSS MP.3
MP.4	I can model with mathematics. CCSS MP.4
MP.5	I can use appropriate tools strategically. CCSS MP.5
MP.6	I can attend to precision. CCSS MP.6
MP.7	I can look for and make use of structure. CCSS MP.7
MP.8	I can look for and express regularity in repeated reasoning. CCSS MP.8