Syllabus – Algebra 150
Collegiate School of Medicine and Bioscience
2023-2024

Instructor

Name: W. Max Sabor **Room:** 133
Email: william.sabor@slps.org **Mentor Group:** 11th Eagle

About:

Mr. Sabor is entering his eleventh year teaching mathematics. He is the instructor for Algebra I and College Prep Algebra at the Collegiate School of Medicine and Bioscience. Prior to joining CSMB, Mr. Sabor taught secondary mathematics at KIPP Truth Academy and Grand Prairie High School in Dallas, TX. He also served as a math teacher and department chair at Pioneer Charter School of Science II in Boston, MA. Mr. Sabor earned his A.B. in Mathematics cum laude from Harvard College in 2013, and holds teacher certifications in Massachusetts, Texas, and Missouri. He currently studies at St. Louis University in the Educational Leadership M.A. track. In his spare time, Mr. Sabor occupies himself with musical endeavors, currently singing with the Ambassadors of Harmony. He lives in St. Louis City with his wife and two cats.

Course Description

Algebra will require a mastery of pre-algebra and basic numerical concepts. In this course, students will use symbolic reasoning to represent mathematical situations, express generalizations, and study relationships among quantities that can be represented with linear equations, linear inequalities, and linear functions. Students will also be introduced to nonlinear functions such as quadratics and exponentials. By the end of the course, students should be able to represent mathematical models using a variety of methods. Successful completion of Algebra 150 will give students a strong foundation for future math courses.

Course Sequence

0. Advanced Arithmetic
1. Solving Equations and Inequalities
2. Slope
3. Functions
4. Systems of Equations
5. Exponential Equations
6. Polynomials
7. Quadratic Equations
8. Data and Statistical Analysis

Grading

40% Homework
30% Unit Tests
10% Cumulative Quizzes
10% Projects
10% Semester Final Exam

Resources

Learning Resources
When a student is stuck on a particular problem or concept, the following resources are good places to try:

- CSMB Math Tutoring (bit.ly/CSMBMath2324)
- enVision Algebra I aka Savvas Learning
- Khan Academy (www.khanacademy.org)
- IXL Math (www.ixl.com/math/)
- Art of Problem Solving (www.artofproblemsolving.com)
- CSMB classmates
- Mr. Sabor (william.sabor@slps.org)

CSMB After School Math Tutoring
Starting in September, math tutoring will be available to all Collegiate students after school from 3:15 PM – 5:15 PM. Transportation is available.

Sign up at bit.ly/CSMBMath2324 in advance. Low signups may occasionally cause tutoring to be cancelled, and high signups may cause walk-ins to be turned away.

CSMB Math Tutoring Center
Throughout the year, Mr. Hommowun will provide math tutoring during mentor.

Invite-only mentor tutoring is provided on Wednesdays and Thursdays. Students will be expected to attend if their teacher stamps their passport and writes "math tutoring center."

Students sign up to attend mentor tutoring on Mondays, Tuesdays, and some Fridays. See Mr. Hommowun to sign up in advance.

Mathematical Tools
The following tools do not provide explanations, but they are very useful tools to have available.

www.desmos.com/calculator www.wolframalpha.com www.geogebra.org

Electronic Accounts
Students will use the following electronic accounts over the course of the year. There is a possibility that one or two may be added.

- Microsoft Teams, including Microsoft OneNote's Class Notebook
- Desmos Student (student.desmos.com)
- IXL Math (www.ixl.com/math/)
- Edulastic (www.edulastic.com)
- Savvas Learning (savvasrealize.com)

Absences

When you are absent, it is your responsibility to check with classmates or Mr. Sabor for the missed learning. Upon returning, make sure you understand your makeup work and timeline by the end of that day. If the missed work or return date includes an assessment, contact Mr. Sabor to determine when a makeup can occur. If you know that you will be absent, contact Mr. Sabor in advance.

Assignments

Traditional Homework

Definition:
Traditional homework is an asynchronous assignment with multiple practice problems, such as a worksheet.

Student's first attempt:
The student must show work. The work must be the student's own work.

Options by instructor preference:

1. **Preferred option.** Write work and answers on an organized sheet of paper – either the original document, lined paper, or graph paper. Upload a picture or PDF of the work and answers into OneNote.
2. Type work and answers directly into OneNote using the equation editor tool.
3. Handwrite work and answers in OneNote using the drawing tool.
4. Type work and answers directly into OneNote using the typing tool.
5. Write work and answers on an organized sheet of paper. Upload a picture or PDF of the work and answers into Teams.
6. Other options can be available if a student explains their specific situation.

Sometimes, a Microsoft Form will be provided along with the worksheet. Microsoft Forms will auto-grade based on the provided answer key, and students will be able to see what they got correct and incorrect. They will not be able to edit their responses.

Students who wish to have their assignment graded completely manually should place a star in the top left corner of their assignment page in OneNote.

Mr. Sabor's first grading:
After the deadline, Mr. Sabor will look at responses to identify trends and misconceptions, first for the class, then for individual students. He will use this information to inform instruction.

After class, Mr. Sabor will grade assignments on a scale of 0 to 10. While every whole number between 0 and 10 is possible, the following descriptors are provided for your reference.

- 0: No work visible, assignment not attempted, or plagiarized.
- 3: All questions attempted, all work shown, and no questions correct.
- 8: All questions attempted, all work shown, and proficiency demonstrated.
- 10: All questions attempted, all work shown, and almost no errors.

Mr. Sabor will always provide personalized feedback to the students who place a star in the top left corner of their assignment page in OneNote. Depending on the assignment, other students will receive personalized feedback in OneNote for (a) all students for all questions, (b) all students for selected questions, (c) selected students for all questions, or (d) selected students for selected questions. This will depend on the complexity of the assignment, the length of the assignment, and student mastery.

Student's future attempts:
Students may revise homework or submit late homework for up to full credit. This is strongly recommended for all assignments below a score of 8/10.

Do not delete the previous attempts' work or responses, but clearly label the new responses elsewhere in OneNote. There is no need to redo questions that were correct in earlier attempts. When doing so, the student should email Mr. Sabor to inform him which assignment requires re-grading.

Please understand that grading makeup work may be delayed, as it is lower priority than other professional responsibilities, including grading on-time work.

Students who frequently submit work late may be required to make and demonstrate commitments to time management before becoming re-eligible to submit makeup work. Such commitments could include parent meetings, scheduling homework time, creating reminder systems, and anything else necessary to improve timeliness.

Mr. Sabor's regrading:
When Mr. Sabor grades late work, it will be graded on the same scale as the original grading. Every question will be graded individually based on OneNote only.

It is possible, but not guaranteed, that extra credit assignments may be offered during the year. If extra credit is offered, students must earn at least an 8/10 on all homework assignments assigned between the beginning of the semester and that semester's Final Exam in order to be eligible for extra credit. The final deadline for submitting late work will be publicized near the end of each quarter.

Homework Triage

Ideally, students should be able to complete homework independently and accurately in a reasonable amount of time. If a student is regularly struggling with Algebra homework, below is a system that provides Mr. Sabor with data.

This triage system does not result directly in a good homework grade. However, it shows a good faith effort from which we can effectively work during class or in tutoring.

All percentages listed below are approximate.

- If you are 80%-100% confident on a question, do it and show your work.
- If you are 40%-79% confident on a question, do it, show your work, and flag it with a "?".
- If you are 10%-39% confident on a question:
    - If the question is short, do it, show your work, and flag it with a "?".
    - If the question is long, describe your best guess for a strategy and/or ask a question.
- If the whole assignment might be a 5/10 or lower:
    - Work with a trusted peer or tutor.*
    - Schedule a time to work with Mr. Sabor (tutoring).

* If you work with a trusted peer or tutor, that peer or tutor must realize that helping is not the same thing as answering. They should not be providing you with responses or work. Instead, they can guide you towards the answer, similarly to how Mr. Sabor models in class.

Task	Purpose	Timing	Format	Cooperative?	%	Grading	Late & Revisions
Do Now	Review the previous lesson, review related prerequisite skills, and/or spark into a new topic.	2-6 min. daily	keep or recycle the paper	independent	0	Consistently try.	Don't turn in. Not graded.
Classwork	Explore, explain, practice, and elaborate new ideas.	20-60 min. daily	keep the paper; digital available	collaborative	0	Consistently try.	Don't turn in. Not graded.
Exit Ticket	Get concrete, immediate feedback on the day's learning target. Track & communicate different proficiency levels.	2-6 min. daily	return the paper	independent	0	Exit Ticket Proficiency Scale	Due immediately. Not graded.
Homework	Practice the current skill(s). Review old skill(s).	30-60 min. daily	keep the paper; return the digital	collaborative	40	Homework Proficiency Scale	Due 8 AM on the next class day. Late work accepted until near the end of the quarter for full credit.
Pretest	Gain familiarity with the formatting, topics, and difficulty of the Unit Test. Practice with rigorous test-style questions at a variety of proficiency levels.	30-77 min. per unit	show the paper; digital available form responses help for planning	collaborative	HW	Every question is attempted with work shown.	Due at the beginning of the next class. No pretests accepted late.
Extra Practice	Additional practice with rigorous test-style questions at a variety of proficiency levels.	once per unit	digital only unless requested	collaborative	0	Completely optional.	Don't turn in. Not graded.
Extensions	Extend thinking with rigorous, advanced questions. May not be test-style questions.	occasional	depends	collaborative	0	Completely optional.	Don't turn in. Not graded.
Tests	Evaluate proficiency on Unit skills. Practice with rigorous test-style questions at a variety of proficiency levels.	45-77 min. per unit	return the paper	independent	30	Exam Proficiency Scale	Due immediately. See Test Retake Policy.
Quizzes	Evaluate basic- and proficient-level skills.	6-15 min. weekly	return the paper	independent	10	% correct	Due immediately. Retakes allowed daily, 2 point penalty per retake.
Projects	Apply some math content in a real-world context.	2-10 hr. 1-2 times per semester	depends	independent	10	Project-specific rubric	Due 2-8 weeks later. Late projects accepted up to 1 week late at a 20% penalty.

Final Exam	Evaluate cumulative proficiency.	77 min. per semester	return the paper	independent	10	Exam Proficiency Scale	Due immediately. See Collegiate Final Exam Policy.
Common Formative Assessments (CFAs)	Show SLPS what you know, before you learn it.	4-6 questions	return digitally	independent	0	% correct	Due immediately. Absent students must retake within the SLPS testing window.
Common Summative Assessments (CSAs)	Show SLPS what you know, after their scheduled time for Mr. Sabor to teach it.	4-6 questions	return digitally	independent	0	% correct	Due immediately. Absent students must retake within the SLPS testing window.
End-of-Course (EOC)	Demonstrate your proficiency in Algebra 1 to Missouri. Also affects Collegiate's ranking.	45-65 questions	return digitally	independent	0	EOC Proficiency Scale	Due immediately. Absent students must retake within the SLPS testing window.

Standardized Testing

The Missouri Department of Elementary and Secondary Education requires all students to take the **Algebra I EOC** (End-of-Course) Exam before their high school graduation. St. Louis Public Schools' Algebra 150 course is taught with the presumption that all students will take the Algebra I EOC in the spring.

Furthermore, college admissions consider student data from standardized tests such as the **ACT** and **SAT I**. Students in the Class of 2027 will typically take one or both of these exams during the 2026 calendar year. Both of these exams include math sections where Algebra I is a primary component. In order to prepare students for these assessments, relevant questions from these exams will be used in models and assignments throughout the course.

National mathematics competitions are opportunities for students to distinguish themselves in mathematics. Interested students are encouraged to explore contests such as the American Mathematics Contests (**AMC**), sponsored by the Mathematical Association of America (MAA).

Please note that while math tests are an integral component of an American K-12 mathematical education, they do not represent the pinnacle of mathematical knowledge nor achievement. Mathematicians spend their research hours conjecturing, wondering, reading, discussing, and proving. The mark of astounding mathematics is insight supported by exacting logic. Tests can reward these skills, but they also reward computational speed, focus, and the ability to remain calm under pressure. Students and families are encouraged to view any test result as a snapshot of a student's knowledge on a specific topic in that point in time, not as a measurement of self-worth. Treating a poor score as a call to change without being an indictment of the student is a nuanced and necessary attitude for productive and healthy mathematical growth.

Formal Assessments:

All formal assessments are to be done independently. This includes common formative assessments, common summative assessments, quizzes, tests, test retakes, practice end-of-course assessments, and semester exams.

Test Retakes

At the end of each quarter, one retake opportunity will be scheduled for any tests taken throughout the quarter. In order to be eligible for the test retake, a student must:

- Complete all homework assignments at a minimum score of 8/10.
- Request the retake before a given deadline.

For 1st and 3rd quarters, the test retake opportunity will be a specific day after school. For 2nd and 4th quarters, the test retake opportunity may be the corresponding unit's questions on the Semester Exam.

Students who are eligible for and complete retakes will have their Unit Test score replaced with their retake score, if and only if it is higher than the original score.

Classroom Expectations

In Mr. Sabor's classroom, great ideas always win.

Below you will find Mr. Sabor's vision for learning. If you have a great idea of how to improve upon class, contact him respectfully outside of class time. Not all suggestions will be implemented, as a classroom must balance and respect the needs of all students, their families, the instructor, the school, the district, the state, and the content.

WELLNESS

Be safe. Keep your family and loved ones safe. Follow the current COVID safety protocols. Email Mr. Sabor (william.sabor@slps.org) if you have to be absent or have concerns about workload. Ask for help.	Your health and safety are more important than your education. We can reschedule parts of your education when important life events happen. It is mature and respectful to ask for help when you think you might need it.

TRUTH

Do not make statements that are false, including intentionally getting academic questions wrong or showing someone else's work as your own.	Someone might believe the lie. If people know you have lied before, they are less likely to believe you, even when you are telling the truth. Lies slow down productive conversations. Cheating reduces learning. Cheating causes people to get expelled from college and lose their jobs in the workforce.

PROFESSIONALISM

Follow dress code and leave the space better than you found it. Help clean messes that have been accidentally abandoned. Use polite word choice, tone, and intention. Use the correct voice level for the situation (forte only if presenting to the class, mezzo forte in group conversations or a teacher-student conversation in front of the whole class, piano or mezzo piano in one-on-one conversations). Attempt to use correct grammar and pronunciation. Do not publicly display romantic affection.	These are rules common to professional settings. Many people prefer polite language, especially Mr. Sabor. Using an incorrect voice level can prevent people from properly hearing each other. Failing to do any of these things can communicate disrespect. Many employers will judge potential employees negatively for failing to meet these expectations.

PRESENT

Be in the classroom for 100% of the class time scheduled to the best of your ability. Enter early and wait for the words, "you are dismissed" before leaving. Minimize the number of restroom, water, counselor, etc. breaks that you take as well as their length. Remain awake and focused on the task at hand.	Whenever you are out of the classroom, you are missing an opportunity to learn. Punctuality communicates respect. Loud, frequent, or mistimed entry or exit can distract the rest of the class.

PERSISTENCE

Try your very best when attempting any problem assigned to you. Read the question and pay attention to details. Comprehend the question by identifying vocabulary words and drawing a diagram when appropriate. Develop questions to ask that are as specific as possible. Ask those questions if you remain stuck, and write your questions down if no one assists you immediately. Refer back to your notes. Show your work legibly and include units in your answer. If there is a graph as part of your answer, use a ruler and label your axes. If you are asked to explain something, write in complete sentences.	Math is not a spectator sport. You must do math to learn math. Most work will be graded, and consistent good grades are necessary to excel. With enough time, effort, and support, everyone can confidently understand Algebra. The less you understand, the harder you will need to work. A strong work ethic might be the most important thing you can learn in an Algebra class.

EFFICIENCY

Use every possible moment during live instruction to maximize your Algebra learning. Stay awake, take notes, ask questions, listen to directions, read directions, follow directions promptly, try all of the practice questions to the best of your ability, get feedback on your practice, and use feedback to make improvements. Track the speaker, board, or paper. Do not create, encourage, or pay attention to distractions.	Efficiency maximizes results. It is disrespectful of everyone else's time (students and staff) to ignore that a classroom is a learning environment.

SUPPORT

Encourage others to do the right thing quietly and politely. Respond to peer questions. Explain process without giving answers. If another student makes an academic or ethical error, support them emotionally without agreeing with the error.	A classroom of 25 instructors and learners can achieve far more than a classroom of 1 instructor and 24 learners. Learning requires that people make mistakes and learn from the consequences. Good friends are sympathetic to the emotions of their friends and also wish success for their friends.

PREPARED

Every day, the first time you walk into class, you should bring your own pencils, organized binder, old work, blank graph paper, charged laptop, charger, and passport. Homework should be completed and submitted by 8:00 AM on the due date, with two exceptions: (a) If Thursday and Friday are both B days, the deadline for Thursday night's homework shall be 5 minutes before the beginning of Friday's Algebra I class period. (b) Another time can be agreed upon by the instructor & student.	Internet access and power supply are necessary to access some class activities. Your teachers do not have the time or money to provide new materials for you on a regular basis. Disorganized or uncomfortable workspaces can distract from productivity. Timely assignment submission allows Mr. Sabor to look for trends and misconceptions before class begins. Keeping track of your own things is a sign of maturity and increases retention of knowledge. Having your materials organized increases retention of knowledge.