Gilbert Community High School Advanced Math 2025-2026 with Mr. Martinek

https://sites.google.com/a/gilbert.k12.ia.us/advanced-math-with-mr-martinek/home

Math Department Purpose Statement

Students will work collaboratively to persevere in solving problems by communicating respectfully to grow as mathematicians

Common Core Mathematical Practices with Student Meaning

- 1. Make sense of problems and persevere in solving them: When presented with a problem, I can make a plan, carry out my plan, and evaluate its success.
- 2. Reason abstractly and quantitatively: I can use reasoning habits to help me contextualize and decontextualize problems.
- 3. Construct viable arguments and critique the reasoning of others: I can make conjectures and critique the mathematical thinking of others.
- 4. Model with mathematics: I can recognize math in everyday life and use math I know to solve everyday problems.
- 5. Use appropriate tools strategically: I know when to use certain tools to help me explore and deepen my math understanding.
- 6. Attend to precision: I can use precision when solving problems and communicating my ideas.
- 7. Look for and make use of structure: I can see, understand and apply patterns.
- 8. Look for and express regularity in repeated reasoning: I can notice when calculations are repeated. Then, I can find more efficient methods and shortcuts.

Students and classrooms that are able to follow these practices have the potential to learn mathematics on a deep level.

I. Gilbert High School Behavior Standards

1. Respect

- Follows the instructions of the teacher in a cooperative manner
- Responds appropriately when addressed
- Is polite and treats others with kindness
- Listens actively when others are speaking
- Respects others personal property, space, and opinions

2. Responsibility

- Arrives to class on time
- Stays where they are supposed to be
- Brings appropriate materials to class
- Submits work on time
- Accepts ownership for actions
- Follows expectations of classroom and high school without reminders

3. Readiness

- Maintain engagement in the classroom setting
- Ask for help when needed (academic, social, or emotional)
- Set and track goals
- Have a growth mindset
- Use technology appropriately within a school setting

II. Classroom Materials and Policies

A. Binder

- 1. A binder that is used only for Advanced Math is strongly recommended. A 1.5 to 2 inch wide binder is suggested.
- 2. A binder works best for students to keep notes and homework organized for the way we do lessons.
- 3. Students will turn their binders in periodically. There will be more information about that later.
- 4. Loose-leaf paper should be used in the binder.

B. Standard Materials

- 1. Pencil(s) and/or pen(s)
- 2. Paper
- 3. Calculator: A scientific calculator is recommended for class. The TI-30 XIIS is the scientific calculator most students used in previous math classes and will also work for Advanced Math.
- 4. School issued Chromebook
 - a. Students may be asked to access Desmos, Geogebra, and other websites/apps using their Chromebooks.
 - b. Gilbert High School may monitor student use of the Chromebook.
- 5. School issued CME Precalculus textbook. While we will follow concepts from the book, not all assignments will be from the book.

C. Miscellaneous Policies

- 1. Assuming school policies allow students to leave the classroom during class, students will be asked to fill out a classroom record such as SmartPass so the date, time, and reasons are documented.
- 2. Food and beverages should be limited. They should not be a distraction for you or others. Snacks and drinks should not make a mess. They should not prevent you from working individually or in groups.
- 3. Students who fail to follow school policies or act in a manner deemed inappropriate will receive disciplinary action at the teacher's discretion.

In addition to these guidelines, you will need to follow all of the school policies. Failure to follow these policies may result in disciplinary action at the teacher's discretion. The guidelines may be altered at the teacher's discretion.

III. Semester Grading

- A. The semester grade will be a running total of the following categories.
 - 1. Assessments -- 63% of the semester grade but will be 70% of the displayed grade before the semester exam is included.
 - 2. Daily Work -13.5% of the semester grade but will be 15% of the displayed grade before the semester exam is included.
 - 3. Math Apps -13.5% of the semester grade but will be 15% of the displayed grade before the semester exam is included.
 - 4. Communication 0% of the semester grade but used to effectively communicate with students and parents.

Note: The Assessments, Daily Work, Math Apps, and Communication categories are described in more detail later.

- 5. The Semester Exam will be 10% of the semester grade.
- B. The following grading scale will be used for semester grading with P being your percentage. Infinite Campus may round grades to the nearest percent.

	$87\% \le P < 90\% \text{ B+}$	$77\% \le P < 80\% \text{ C+}$	$67\% \le P < 70\% \mathrm{D}$ +	
$93\% \le P < 100\% \text{ A}$	$83\% \le P < 87\% \text{ B}$	$73\% \le P < 77\% \mathrm{C}$	$63\% \le P < 67\% \mathrm{D}$	
$90\% \le P < 93\% \text{ A}$ -	$80\% \le P < 83\% \text{ B}$ -	$70\% \le P < 73\% \text{ C}$	$60\% \le P < 63\% \text{ D}$	P < 60% F

C. Grades will be updated in Infinite Campus about once a week after the first quiz/test for the semester.

IV. Assessments (aka Quizzes and Tests)

A. Quiz/Test Format

- 1. Each quiz/test will focus on concepts learned during the unit.
- 2. Each quiz/test <u>may</u> include a few concepts from previous units.
- 3. There may be multiple forms of a quiz/test that students take.
- 4. Between 85% to 95% of the points on a quiz/test (excluding review questions) will likely come from Level I questions while 5% to 15% of the points will likely come from Level II questions. Level I questions should be considered the "essential standards" of the class while Level II questions are meant to develop a deeper understanding of the concepts for students planning to take the next level of math class. There is more information about Level I and Level II in the "Daily Work" section.
- 5. Questions on the quiz/test will address concepts learned during class notes, activities, daily work, and review activities.
- 6. Students are expected to complete a quiz/test during the class period that it is given.
- 7. Students are usually allowed to use their calculators on a quiz/test as directed by the teacher.
- 8. Students may be able to use Desmos or similar apps/websites on school-issued Chromebooks instead of or in addition to a calculator when directed by the teacher on a quiz/test. Gilbert High School may monitor student use of the Chromebook.

B. Absences

- 1. Quizzes/Tests are announced in advance on the schedule. Students receive paper copies of the schedule which is also posted on the website. Verbal and written reminders of upcoming quizzes/tests are often given during class.
- 2. Students are expected to take the quiz with the class even if there were absences in most cases. We typically either do a review and/or start the next unit on the day before the quiz/test. The review is often handed out in advance and is posted on the website. A solution guide is also usually posted on the website. Reassessments are also possible.
- 3. Students absent the day of a quiz/test will be expected to make it up during the first day back to class unless other arrangements are made.
- 4. If a student knows they will be absent on a quiz/test day, they should make arrangements to take the quiz/test before the absence in most cases. This could include taking the quiz/test when other students work on the review.

C. Quiz/Test Reassessments:

- 1. Students may complete a Reassessment of a quiz/test in an effort to show an improved understanding.
- 2. Students must make quiz/test corrections, preferably in the classroom (but not required to be done in the classroom), before being able to start the Reassessment. The corrections should be made on their own paper. The corrections should include a correct solution to any missed problem with an explanation about how to solve the problem.
- 3. The Reassessment will contain only Level I questions so the maximum points will likely be between 85% to 95% of the points on the original quiz/test.
- 4. The entire correction and reassessment process should be completed either within two weeks of when the quiz/test was returned to the class or the last day before scheduled school Semester Test Days, whichever comes first. The reassessment deadline will typically be listed on a whiteboard in the classroom.
- 5. The Semester Exam cannot be retaken.

V. Daily Work

A. Binder Organization

- 1. The general classroom guidelines should be at the very front of the binder.
- 2. After the guidelines should be a section for your notes in order with the homework for that lesson. You may do assignments on the back of notes or do two days of notes on one paper (front and back) and then the assignment on a new paper. Some people like to have separate sections for homework and notes. Whatever your method of organization, you must be able to bookmark the start of the homework for that binder check allowing me to find the homework assignments in order for that binder check. I will not search through your binder to find things. Your method of organization should be consistent throughout the binder check.
- 3. Your binders will be collected periodically, typically on a quiz/test day, and evaluated based upon homework completion, which includes showing expected steps, and organization. The scores on the binder checks will be included in the daily work portion of the grade. A score sheet will show the final score using scoring guidelines described on it. The schedules will usually list the items on each particular binder check.
- 4. Late binders will generally not be accepted. However, each student will have 2 opportunities each semester to resubmit their binder for an improved binder check score. Students can resubmit their binder for any reason such as not having their binder at the start of class when it was due, missing one or more items from the binder check, having one or more incomplete assignments on the binder check, etc. Students wishing to resubmit their binder must do so before the quiz reassessment deadline for the corresponding lessons.
- 5. Students may choose or be directed to turn their daily work into the basket instead of using a binder.

B. Homework

- 1. Homework could be assigned problems from the textbook or a worksheet/packet.
- 2. The **lesson number** for homework from the book should be written using large print in the center of the paper at the top.
- 3. Students learn mathematics by solving problems. Copying homework from other students, apps, solution guides, etc. does not help most students learn. The best way to learn mathematics is to do the problems with understanding. Homework is your chance to build an understanding of concepts and solution processes.
- 4. Students are encouraged to talk with each other about homework.
- 5. Homework solution guides are often posted on Google Classroom and/or the Advanced Math website for students to check their solutions.
- 6. While most students will not turn in homework on a daily basis, lessons assigned one day should be completed before the next class unless otherwise indicated. Homework will be graded when binders are turned in. Students who have absences before the binder turn-in will still be expected to turn in their binders with the rest of the class. You will receive a weekly schedule that will also be posted on my website.
- 7. **HOMEWORK GRADING:** Most homework assignments on a binder check will receive a score of 1 to 4 based on completion of Level I questions. To be considered complete, expected work must be shown with the problem. A grading description may be included on the binder check sheet. Level I questions should be considered the "essential standards" of the class and are "required." Level II questions are "encouraged" and meant to develop a deeper understanding of the concepts for students planning to take the next level of math class. Completion of Level II problems will not be graded on the binder check.
- 8. I may assign electronic "homework" for some lessons with Google Forms, Google Classroom, Screencastify, etc.

C. Notes

- 1. Notes will be taken from discussions on almost a daily basis on loose-leaf paper or class handouts. Clearly label each day of notes with the lesson number and date for later reference.
- 2. A good rule of thumb is that if it is important enough for me to write on the board or display, then it is important enough for you to write in your notes.
- 3. You may want to add some writing to your notes to help you to remember the ideas better.
- 4. Examples done in class will be very similar to the problems on the assignment as well as on the quizzes and tests. It is to your advantage to truly understand them.
- 5. If you miss class, get the notes from a classmate AND/OR check for notes/resources on the website so you will understand what we learned. It is much better to do this before returning to class since mathematics builds on previous knowledge and having past notes will help you understand current discussions.

VI. Math Apps

A. General

- 1. There may be about 5-10 Math Apps Sets per semester.
- 2. Students will typically have at least one week to complete each set so they should be done on time. They will likely be posted on Google Classroom well before the due date with reminders given on the weekly schedules. It is possible to work ahead on most Math Apps Sets.
- 3. Most Math Apps Sets will be submitted electronically.
- 4. **Late Math Apps Sets may not be accepted.** However, students will have the opportunity to replace at least one Math Apps Set Score (excluding projects) per Semester by completing a replacement assignment that will be posted on Google Classroom. The replacement score cannot exceed 100% of the original assignment.
- 5. Students are allowed to use resources to review the concepts on the Math Apps Sets and can ask questions.
- 6. A "goal date" may be given for a Math Apps assignment that is before the due date. Students who have not submitted the assignment before the "goal due date" may be asked to work on the assignment during Success Center. The assignment may also be marked as "missing" in Infinite Campus after the "goal date" as a reminder.

B. Math Apps Set Types:

- 1. **Google Form (Topic Specific)**: Students will be given computerized assignments to practice certain skills that are related to each other. Students will want to keep track of their work and solutions to review feedback. After the due date, students will usually see a solution guide for the problems they missed so they can correct misconceptions before the next Google Form is due.
- 2. **Google Form Review:** Students will want to keep track of their work and solutions to review feedback. After the due date, students will usually see a solution guide for the problems they missed so they can correct misconceptions before the next Google Form Review.
 - a. **Semester 1:** These are skill-based review activities submitted with a Google Form. Each item is labeled by the topic it reviews. There is a document sorted by topic linked in the Google Form with videos and completed notes showing the solution to a similar problem allowing students to review key concepts.
 - b. **Semester 2:** These Google Form Sets will be based on the end of the year exam topics, which have been learned up to the point when the particular form is due. Each question will be labeled with the Chapter the concept comes from so students can look up concepts as needed.
- 3. **Google Classroom Assignments** will be given as a way for students to explore math related-careers, math applications, math teaching practices, and other similar items. The assignments often direct students to specific websites to select topics of interest and summarize what is learned through question prompts.
- 4. **Projects:** Students may be asked to do a project for certain topics. The project scores may be included in the Math Apps grade category.

VII. Communication

(grade category in Infinite Campus)

A. General

- 1. The Communication grade category is meant to share information with students and parents in an efficient manner.
- 2. The Communication grade category will not factor in a student's grade.

B. Examples of items in Communication grade category

- 1. I may ask students to write goals for class, share information with their parents, etc. that are not graded but that I still want parents to know if their student completed the task or not.
- 2. Quiz/Test Reviews may be turned in for a collected or completion score that is not part of the grade.
- 3. Students may be asked to complete Google Form Homework Checks as a short check for understanding. While the Homework Checks are not graded, the scores may be reported for communication purposes.

VIII. Class Resources

A. Advanced Math Website Resources

(https://sites.google.com/a/gilbert.k12.ia.us/advanced-math-with-mr-martinek/home)

- 1. Schedules on Homepage: PDF versions of the paper schedules given to students are posted. The paper schedules have many details including lesson objectives, assigned problems, due dates, etc.
- 2. Investigation Pages: Chapters in the CME series are organized by Investigation (which is usually 3-5 lessons of similar concepts within a chapter). Each Investigation has its own page on the website. Resources are further broken down as described below within each investigation.
 - a. A Activities/Blank Copies: Blank PDF versions of worksheets given to students and Geogebra templates are examples of items in this folder.
 - b. A Lessons: Google Slide Presentations are included for most lessons formatted in a similar way. A blank example problem will be on a slide. The next slide will have a video showing how to solve that problem. The next slide will have a copy of the notes from the video to solve the problem. Finally, a slide will have a copy of the solution to the problem from the notes section of the website. The next example will have a similar format.
 - c. A Notes: A copy of notes for most lessons is posted in this folder. The notes often show steps and short notes about what the purpose/what is being done on the steps. The folder is also where solution guides to reviews are typically posted.
 - d. After Investigation A, resources for Investigations B and C are posted in the same format on their own pages.

B. Advanced Math Google Classroom Resources:

- 1. I usually post things on Google Classroom that I expect a student response for such as Math Apps Sets, Homework Checks, goal setting activities, etc.
- 2. I use the "Classwork" tab on Classroom to organize items by type. I often put the item(s) that is due next at the top of each "topic" (think folder). Items that already should have been completed may be moved to another completed "topic."
- 3. Many homework solutions are posted on Google Classroom.

C. Khan Academy (https://www.khanacademy.org/math) has many useful resources including:

- 1. Trigonometry https://www.khanacademy.org/math/trigonometry
- 2. Precalculus https://www.khanacademy.org/math/precalculus
- 3. Several other math courses on Khan Academy may be helpful also. Remember, most math concepts have many ways to be viewed. Similarly, most problems have multiple solution methods. Some resources may present ideas in slightly different ways than we view them in class.

Sincerely.

Dear Advanced Math Parent(s)/Guardian(s):

My name is Mr. Martinek and your son or daughter is taking **Advanced Math** with me this year. I started teaching at Gilbert High School in August of 2006. Prior to coming to Gilbert, I taught for three years at South Tama County High School. I earned my bachelor's degree from the University of Northern Iowa in secondary mathematics education in May of 2003. I completed work on a master's degree in mathematics with a secondary teaching emphasis in the summer of 2006 from UNI.

I will set high but reasonable expectations for students in class. One of the expectations I have is for students to complete homework on time. Students will typically have daily homework assignments. They will also have longer-term assignments called Math Apps Sets. It is essential your son or daughter complete these assignments on time and in a high-quality manner. Mathematics is a subject that often builds upon previous learning. If assignments are not completed on time, it will be difficult for students to make connections to the new material we are learning. I typically grade daily assignments from students in Advanced Math when they turn in their binders on quiz/test day. Keeping up to date with daily homework (even if it is not turned in the next day) was the biggest piece of advice students from previous years wanted me to share with future students. When students have questions on assignments, it is better to ask those sooner rather than later even if it is not due immediately. Please read the Advanced Math Classroom Guidelines for information about Advanced Math including classroom guidelines, procedures, class materials, grading, homework, Math Apps Sets, resources, etc. Students will use a binder, scientific calculator, and their school-issued Chromebook in Advanced Math. Students in Advanced Math do NOT need a graphing calculator for the 2025-2026 school year.

Students and parents can use Infinite Campus to see grade updates for Advanced Math. Students will see I try to carefully design class procedures, routines, and lessons to help them learn. However, there are times when plans must be revised. I communicate expectations in class. I also use a website, Google Classroom, and email at times for communication and to share resources with students. I have a website for <u>Advanced Math</u>. The Advanced Math website contains schedules (students get paper copies as well) and resources such as blank worksheets, video lessons, and completed notes. The Classroom Guidelines include a description of several class resources including more details about the Advanced Math website. I also post items to an Advanced Math Google Classroom. The Advanced Math website is also linked on Google Classroom to make it easy for students to find.

As students get to know me, I hope they are comfortable enough with me to ask questions when they have them. I am often available before school, after school, and during Success Center in addition to class time to answer student questions so students can stop in with questions as needed. Also, your son or daughter should feel free to talk to me to set up times where they could ask questions outside of class if they want to be sure I am available then. I am here to help students learn mathematics. Please read through the guidelines with your son or daughter. After you have read the guidelines, please sign this letter and your son or daughter should return this letter to class. Students should return this signed letter by Friday, August 29 so I know they have shared the information with you. If you have any questions about the classroom guidelines, feel free to contact me at 515-232-3738 or martinekc@gilbert.k12.ia.us.

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Mr. Martinek			
We have read and understand the cl	assroom guidelines.		
Parent/Guardian Printed Name	Parent/Guardian Signature	Date	_
Student Printed Name	Student Signature		Period