

**Jorge Cabrera**  
**10<sup>th</sup> Grade Mathematics Syllabus**  
**High Tech High International**  
**2017-2018**

Teacher: Jorge Cabrera

Room # 115

Teacher Contact Information:

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**Course Objectives:**

The focus of the 10th grade math class is the continued development of the student's ability to think critically about challenging and complex Math problems. During the year students will develop their understanding of numbers and all types of numerical relationships. I expect students to deepen their grasp of fundamental mathematical concepts so that they can derive formulas and generalize equations. Students will also be expected to strengthen their problem solving skills by working with real world math problems and by thinking and writing and dialoguing about their problem solving process. This course will also help prepare students for the rigors of college math, science, and engineering by holding them to high academic and professional standards throughout the year.

**Critical Understandings:**

- a) You will develop problem solving, critical thinking skills and positive "habits of heart and mind".
- b) You will be able to explain concepts and solve problems in Mathematics that apply to the real world.
- c) You will further develop your ability to work individually and as a member of a group.

**Habits of Heart and Mind**

Students will also be developing the following habits throughout the year. The goal here is to develop good educational and personal habits.

**Mindfulness** - Am I considering how my choices affect others? Am I aware of what I am saying, thinking, doing, hearing, seeing, or feeling? Mindfulness is the habit of being aware of your thoughts and actions at any moment, all of the time.

**Perspective** - Who says? Is there another way I can look at the situation? How can I try and put myself in someone else's shoes? Perspective is the habit of addressing questions from multiple viewpoints and using a variety of ways to solve problems.

**Cooperation** - Do I know my role in the group? Am I working well with others? Am I including all members in group activities? Cooperation is the habit of working effectively with others, knowing your group strengths and weaknesses, and accepting and giving appropriate assistance.

**Evidence** - Can I support my hypothesis? “WHY” do I think that my answer is correct – based on what or who? Evidence is the habit of bringing together relevant information, judging the credibility of sources, and finding out for oneself.

**Refinement** - Have I put forth my best effort? Have I used all my resources to improve my work? How

many drafts have I completed? Refinement is the habit of being self-reflective of your work, looking for strengths and weaknesses and always making improvements where it is possible.

**Perseverance** - How can I keep myself and others going? Perseverance is the habit of being determined and not giving up even if you feel like it or if you face challenges or problems.

**Compassion** - Do I care? How can I help? Compassion is the habit of recognizing needs or struggles in your environment, and being willing to offer roll- up your sleeves and do something about the situation.

### **Classroom Procedures and Expectations:**

Students are required to:

- *Classroom Respect:* This classroom needs to be a place where all students feel they can express their thoughts and ideas in a supportive and open-minded environment. When others are working through problems or talking to the class everyone is expected to give them their full attention without disruption or interruption. In addition, when giving criticism to others should make sure it is kind, helpful, and specific. Any students not conducting themselves in a respectful manner towards others may be asked to leave the classroom, will lose class participation points, and may have their parents, adviser, and dean notified depending on the severity of the offense.
- Participate in class activities.
- Complete and submit all required assignments on their due dates.

Students will be asked to follow behavior expectations agreed upon at the beginning of the semester as seen in the HTHI Student Handbook.

### **Prep-Preparation for further learning (AKA: Homework):**

Prep (homework) assignments will be given at the beginning of the week and will be due on the first day of the next week. Student should be doing a minimum of 3-5 hours per week.

Remember this is a minimum and students are encouraged to do as much Math as they need to feel confident with the material we are covering. Students need to prepare for college classes that where each class may require 10+ hours of study per week. There will be time in class to work and students who use their class time wisely can expect much less time spent working on homework at home. Prep is important in order to practice your learning and to prepare for learning the next day. Like riding a bike, no one “automatically” knows how to ride a bike. You

fell, scraped your hands and knees, but you persevered and now you can “automatically” ride a bike. Sure friends and family helped you to learn to ride and supported your efforts, but ultimately it is you who rode the bike. Throughout this year, you will be asked to practice or complete work at home. I know students and family members will occasionally help you, but remember it is you who will have to take that test, quiz, or be asked to perform in front of the class. You will have to ride that bike, so let me know if you cannot figure out a particular part of a problem. Write down in a sentence what is confusing to you. DO NOT write down, “I don’t get it.” That is just giving up, and if you give up then you will never be able to feel the joy of the “AHA” moment when it is explained well and YOU GET IT! Please try to do your work and understand it. I would rather have incomplete prep that has writing where you got stuck than copied work! (Note: Please see HTH Handbook for Academic Honesty policy). Examples of Prep work that will be assigned weekly are:

- Prep Packets
- Khan Academy Videos with Notes on Video
- Khan Academy Practice Problems

### **Email Guidelines:**

The use of email is strongly encouraged. To ensure that your work/thoughts/questions are clearly conveyed, please adhere to the following guidelines:

- All files should be attached, NOT copied and pasted into the body of the email
- Be clear, concise, and thorough

Here are some common examples of when to use email.

- To arrange for class work for an excused absences
- Scheduling meetings
- Ask questions about something you did not understand in class

### **Student Support:**

If students have been absent or are falling behind, I may require that they attend to get back on track. Students can also receive help from other teachers during X-Block and the after school tutoring provided through the resource center Monday-Thursday. While there are many supports available, I strongly encourage students to reach out before they ever leave the classroom during the school day. Additional resources will be provided to the students through my Digital Portfolio (i.e., useful websites, video links for review of key concepts, and important documents). I will continually encourage students to come see me – their success is my primary concern! Both students and parents can check grades by logging on to their Powerschool account. You can access Powerschool, by going to <http://powerschool.hightechhigh.org/public> and logging in with your username and password. If you ever have any trouble with your Powerschool account, contact Joanna Clark at [jclark@hightechhigh.org](mailto:jclark@hightechhigh.org).

Grades will be updated no less than every other week. Students and parents should also feel free to contact me if they have any questions or concerns about grades at any time.

### **Make-up tests/quizzes/Homework**

A student is allowed to make up any missing grade if he/she has an excused absence. Also, a student is allowed to **REDO** anything in the gradebook if she or he is not happy with their grade. This policy is true for every quarter. Once the quarter is over the grade is final and cannot be fixed.

Many families have been asking what supplies their child may need during this school year. Below, I have a recommended list of supplies that your child should bring to school. **Please note that if your child does not bring the recommended supplies, the school will provide the supplies for him/her.** If you have any questions/comments about this, please contact me.

**List of Supplies:**

- Pencils
- 3 Ring Binder
- notebook

**Note taking:**

Students are expected to take neat and detailed notes during class so that they can use these to study from for tests and quizzes. \*This is an essential aspect of the college preparation and students should spend the year developing a method that works for them. Students will often be allowed to use notes on test and this will be very helpful.

**Late Homework Policy**

I do NOT accept late work unless prior arrangements have been made between me and the student. If the student did not make prior arrangements with me

**Attendance, punctuality and class participation-** Attendance, punctuality and class participation are essential for successful completion of course. **Tardiness is not acceptable.** Students must be active participants in class and will be required to work in groups.

**GRADE SCALE**

Letter Grade	A	A-	B+	B	B-	C+	C	C-	D/F
Percent Range	93% & Up	90-92 %	87-89 %	83-86 %	80-82 %	77-79 %	73-76 %	70-73 %	0-69%

Please note that all High Tech High schools require a grade of 70% or higher as passing. If a student earns a 69% or lower, that students will either be required to take summer school or have to repeat the grade level (for students that do not pass 2 or more courses)

**Please sign below to certify that you have read the above syllabus:**

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

Parent/Guardian Name: E-mail: Phone:	Parent/Guardian Name: E-mail: Phone:
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Parent or Guardian Signature: \_\_\_\_\_