# Integrated Math 1 with Computing \& Robotics 

Teacher: Mr. Menjivar
Room \#: H1

Email: fmenjivar@dusd.net
Conference: 1 st Period (7:45 AM - 8:36 AM)

## What's This Class About?

Get ready for learning math in a brand new way! While your peers will be learning math in the traditional way of listening to lectures, reading the textbook, and solving problems by hand, this course uses $\mathrm{C} / \mathrm{C}++$ programming language to reinforce and extend mathematical concepts. First semester, we'll be writing computer programs to analyze real life situations, identify given information, and formulate steps that a computer program could calculate to find a solution. Second semester, the Robotics activities will re-enact physically derived mathematical problems through robotics technologies to visualize situations, associate linear and exponential graphs with physical phenomenon, predict and identify key features of the graphs with robotic systems, and solve robotics problems through mathematical modeling and programming.

Topics covered include solving one-variable equations with multiple steps, solving and plotting absolute value equations and inequalities, linear equations, systems of linear equations and inequalities, polynomial functions, exponential and radical functions, evaluating, multiplying, and factoring polynomial functions, probability, statistical data analysis and visualization, arithmetic and geometric sequences, and geometric transformations, including translations, rotations, reflections and dilations.

## Grading (Course Weighting)

Chapter/Unit Tests (35\% of your grade)
Final Test (10\% of your grade)
Quizzes (15\% of your grade)
Homework \& Projects (35\% of your grade)
Class Notes (5\% of your grade)

## Grading Scale

100\% - 90\% A
89\% - 80\% B
79\% - 70\% C
69\%-60\% D
Below 60\% FCourse Prerequisites

Required Materials: Students will be expected to be prepared for each class by bringing the necessary materials. This includes a spiral notebook, pencils, eraser, pens (black or blue ink), ruler, and a flashdrive (2 GB minimum capacity).


#### Abstract

Absences: It is the student's responsibility to get missed assignments after an absence. The student should pick up any missed assignments and get lecture notes from a classmate or through the class website. The student has one day to make up any work for each day that he/she was absent. This includes tests and quizzes. Use after school tutoring hours to complete missed assignments and exams.


## Computer Usage Policy:

Every day you will be working on or around very expensive computing and electronics equipment. This requires a zero food/beverage policy. Failure to comply with this rule of any unsafe behavior in class will result in a $30 \%$ reduction of lab grade and/or loss of lab privileges.

Students must remember that the computer they use is not their personal computer. Students may not make any changes or adjustments to the computer environment. Changes include changing the background picture, and other settings on the computer, and/or downloading any material into the computer. Making changes or adjustments to the inside or outside of lab equipment is considered
inappropriate usage and is grounds for immediate suspension from the lab and possible permanent removal from class accompanied by a loss of credit. This includes the playing of games (either preloaded on the computer, your USB drive, the network, or found on the internet), which is never allowed without prior approval from the teacher.

## Classroom Website:

We have a classroom website where you can get a copy of the syllabus, schedule of daily assignments, reference attachments given in class, or access educational resources throughout the year. The site serves to help you succeed. It does not excuse you for writing down your homework assignments on a daily basis, being aware of key dates, or collecting documents issued in class:
http://mrmenjivarclass.weebly.com/

## Laptop Cart Procedure

## DISTRIBUTION OF THE LAPTOPS AND THEIR PROPER RETURN TO THE CART:

1. Mr. Menjivar will assign a laptop number to student(s) for the semester. Students will be required to check-out the laptop with the corresponding number from the laptop cart and return them to the cart in the assigned slot on a daily basis.
2. If a laptop is damaged, please contact Mr. Menjivar immediately. If not, it will be assumed as your damage. Do not use a damaged laptop.
3. If a laptop will not logon to the network, tell Mr. Conrad, then, restart the laptop. Make sure the wireless switch on the laptop is turned on. The "Wi-Fi" indicator on the laptop will be lit if the switch is on. If the restart did not cure the issue, let Mr. Menjivar know.
4. When student(s) are finished with the laptop, make sure they logoff and SHUT DOWN the laptop. Laptops that are not SHUT DOWN properly can result in future problems. The laptop should be completely off before it is placed back on the cart.
5. Please make sure each laptop is properly returned to the correct shelf on the cart.
