



Course Title: Integrated Math III
Instructor: Ms. S. Davis
Instructor Availability: Tuesday and Thursday 3:15 - 4:15,
all other days by appointment.
Tuesday - Friday, lunch
Instructor Contact: sdavis@gomperscharter.org
(803) 280-7909

Course Description:

Integrated Math 3 is the third course of a three-course sequence including Integrated Math 1, 2, and 3. This course utilizes a problem-centered approach and is integrated with the other core content courses including English, science, and social science. Knowledge is built through units organized around a central theme. Students solve a variety of smaller problems that develop the underlying skills and concepts needed to solve the central problem of each unit. This course weaves content standards from Algebra 1, Geometry, Algebra 2, and Statistics at an intermediate to advanced level including coordinate geometry, circles and other conic sections, binomial distributions, exponential and logarithmic functions, rates of change, trigonometry, quadratics, normal distributions, and standard deviation. The course demands that students further develop the logic needed for abstract problem solving and emphasizes the common core standards. Regular attendance and participation along with timely completion of daily practice and homework are required. Students need to demonstrate competency on assessments (oral and written). Resources used include IXL and supplemental conceptual activities.

GPA Grading Guidelines:

Category	Grading Criteria	Percentage
Classwork	Students are expected to compile daily notes in their course notebook. In addition, daily prelude tasks will be assigned at the beginning of class. Completion of these tasks will be monitored daily with a cumulative grade assigned each week. Classwork also includes assignments and other activities given in class.	30%



Demonstrations of Learning	This course consists of 8 units. Units 1-7 will end with a comprehensive unit test graded on a standard 100 point scale. The course will conclude with Unit 8: Statistics and a statistics project.	35%
Homework/Independent Learning	Students will be assigned homework on a daily basis as indicated on the unit summary and assignments document that will be distributed at the beginning of each unit.	10%
Quarter Finals	Four Quarter Finals will be given throughout the year. Each is a cumulative test that covers all content from the 9 week quarter.	25%

Prerequisites: Successful completion of Integrated Math I and Integrated Math II.

Course Materials: This course requires significant use of several internet based tools. (Google Classroom, DESMOS graphing tool and calculator, IXL web based skills practice and electronic versions of textbooks and reading materials.) Students are also expected to bring paper, pen, pencil, and their interactive student notebook (ISN) to school everyday. It is highly recommended, but not required, that students have the following at home: color pencils, markers, scissors, glue, and white-out.

Course Structure: This course will be a mixture of lecture based instruction with a heavy emphasis on student lead mathematical investigations. Student work will be structured to facilitate development of Mathematical Practice Standards as follows:

1. Make sense of problems and persevere in solving them
2. Reason abstractly and quantitatively
3. Construct viable arguments and critique the reasoning of others
4. Model with mathematics
5. Use appropriate tools strategically
6. Attend to precision
7. Look for and make use of structure
8. Look for and express regularity in repeated reasoning

**Course of Study:**

The following table summarizes each unit of this course. A detailed pacing guide containing specific dates, topic descriptions and common core standards can be found in google classroom. Detailed unit plans will be given to students at the beginning of each unit throughout the year.

Unit Name	Topics	Estimated Time Line	Exams
01 - Basics Review	1.1 Coordinate Plane 1.2 Slopes and y-intercepts 1.3 Linear Relationships Review 1.4 Standard Form of a Line 1.5 .Point-Slope Form 1.6 Horizontal/Vertical lines & Parallel/Perpendicular Lines 1.7 Modeling with Linear Functions 1.8 Solving Linear Equations 1.9 Solving Absolute Value Equations 1.10 Solving Linear Inequalities 1.11 Compound Inequalities and Interval Notation 1.12 Solving Absolute Value Inequalities Key Assignments: End of Unit Exam	09/05/17 - 10/06/17	Unit 1 Test Fri, Oct. 6
02 - Functions	2.1 Relations and Functions 2.2 Domain and Range: Increasing and Decreasing Intervals 2.3 Adding Functions 2.4 Subtracting Functions 2.5 Multiplying Functions 2.6 Dividing Functions 2.7 Evaluating Functions 2.8 Composition of Functions 2.9 Evaluating Composite Functions 2.10 Graphs of Absolute Value Functions 2.11 Piecewise Functions Key Assignments: End of Unit Exam	10/10/17 - 11/17/17	Quarter 1 Final Thur, Oct. 26 Unit 2 Test Fri, Nov. 17
03 - Radical Expressions	3.1 Simplifying Radicals 3.2 Radical Functions and Their Domain 3.3 Evaluating Radical Expressions 3.4 Multiplying Radicals 3.5 Dividing Radicals 3.6 Adding and Multiplying Radical	11/28/17 - 12/12/17	Unit 3 Test Tue, Dec. 12



	Expressions Key Assignments: End of Unit Exam		
04 - Quadratic Functions	4.1 Quadratic Expressions and Functions 4.2 Factoring Monomials from Binomials 4.3 Factoring Quadratics $a=1$ 4.4 Factoring Quadratics $a>1$ 4.5 Factoring a Difference of Squares 4.6 Mixed Factoring Practice 4.7 Quadratic Graphs Vertex Form 4.8 Quadratic Graphs Standard Form 4.9 Intro to Solving Quadratics 4.10 The Zero Property Basic 4.11 Solving Quadratics by Factoring 4.12 The Quadratic Formula 4.13 Solving Quadratics with a Calculator Key Assignments: End of Unit Exam	1/10/17 - 02/09/17	Quarter 2 Final Thu, Jan. 25 Unit 4 Test Fri, Feb. 9
05 - Exponential and Logarithmic Functions	5.1 The Power Rules 1-5 5.2 The Power Rules 6-10 5.3 All Power Rules Practice 5.4 Exponential Relationships 5.5 Exponential Growth and Decay 5.6 The Exponential Function 5.7 Logarithmic Equations 5.8 Exponents and Logs Mixed Practice 5.9 Solving Logarithmic and Exponential Functions 5.10 Modeling with Exponential and Logarithmic Functions Key Assignments: End of Unit Exam	02/13/17 - 03/13/17	Unit 5 Test Tue, Mar. 13
06- Trigonometry	6.1 Review of Pythagorean Theorem 6.2 Labeling Sides of a Triangle 6.3 SOH CAH TOA for Missing Length 6.4 SOH CAH TOA for Missing Angle 6.5 Solving Triangles Key Assignments: End of Unit Exam	04/04/17 - 04/13/17	Quarter 3 Final/Unit 6 Test Fri, April 13
07 - Geometry	7.1 Properties of Angles and Parallel Lines (transversals) 7.2 Triangle Congruence Review 7.3 Similar Triangles 7.4 Triangle Mixed Practice 7.5 Intro to Circles 7.6 Chord and Segment Lengths Inside a	04/24/18 - 05/22/18 AP Testing 5/07-5/18	Unit 7 Test Tue, May 22



	Circle Key Assignments: End of Unit Exam		
08 - Statistics	8.1 Sampling and Survey Methods 8.2 Measures of Central Tendency 8.3 Normal Distributions and Standard Deviation Key Assignments: Statistics Project	05/23/17 - 06/18/17	No Unit Test Statistics Project due Mon, June 18

Course Specific Student Expectations:

THERE ARE NO RETAKES/MAKEUPS of UNIT TESTS. Students who miss a test will receive a score of zero unless I am notified two days in advance (In writing or by email. Verbal notification DOES NOT COUNT.) This is intended to prepare you for college.

Students who do not submit homework when collected/due will be put on Mandatory Academic Tutoring. Late work will receive a 20% point deduction, overall (whether it's five minutes or three days late). If work is not submitted after three days from due date, the late assignment will receive a 0 on the grade book.

Accommodations/Modification and Supports:

Any student who requires accommodations, modifications or additional supports should contact me as early as possible so that we may arrange accommodations, modifications and supports.

GPA Student Expectations:

School-wide Attendance: All students are expected to be punctual and in their classroom seat, ready to learn for each day. Under California law (Ed. Code 48200) all children between the ages of six and eighteen are required to be enrolled and in regular attendance at school. GPA families know that school attendance is the critical first step to make sure that each student receives an education that will help them on their path to college. Students cannot learn what they need to be prepared for the next grade level, if they are not in school. The more absences from school a student has, the more they fall behind in their classes and the more difficult it will be to make it to college.

Planner Use: All students are expected to write all assignments in their GPA planner daily. Your first GPA planner will be provided by the school to support organization and time management.

Homework Completion: As a school working toward college preparation, all GPA students are expected to complete their daily/weekly assignments. Students who fail to complete their homework assignments on time, and are unexcused, will be required to attend lunch and after



school tutoring support daily until completed. Until all assignments are completed, students may not be eligible for athletics, clubs, and other extracurricular activities.

Electronic Device Policy: Cell phones, smart watches, and other electronic communication devices that can send and/or receive data are not permitted to be visible, heard, or used in any manner during school hours except by approval of school authorities. Any violation and/or disruption of the learning process will result in the confiscation of the item. The parent/guardian must pick up the confiscated item from the Office of Student Conduct or the teacher.

Computer/Internet Usage Policy: Students may not use computers and/or the GPA network without proper adult supervision. The teacher/staff will choose resources on the Internet that are appropriate for classroom instruction and/or research for the needs, maturity, and ability of their students.

Acceptable Use-

- Access to any site that provides information relevant to current class assignments
- Access to college or university websites
- Use of teacher approved educational software (games, instructional tools, etc.)

Academic Integrity: Honest behavior is an expectation for all students at Gompers Preparatory Academy. Our goal is to create and maintain an ethical academic atmosphere. Acts of academic dishonesty that will not be tolerated at GPA are listed below:

- Cheating on any classroom assignment, test, or quiz
- Plagiarism - copying or representing another's ideas, words, or work as one's own, without properly citing the source. Plagiarism includes the misuse of published material, electronic material, and/or the work of other students. The original writer who intentionally shares his/her work for another to copy, without the permission of the teacher, is also engaged in plagiarism.
- Fabrication (any falsification or invention of date, citation, or other authority in an assignment); theft or alteration of materials
- Unauthorized collaboration
- Unauthorized use of electronic devices

Students found in violation of GPA's Academic Integrity Policy will be disciplined appropriately which may lead to formal suspension. Consequences for offenses may include, but are not limited to, detention, *lowering of academic and citizenship grade and/or suspensions/exclusion from extracurricular activities.*

Standards/Format for Writing Papers - MLA Format:

The standard format for all papers follows the MLA formatting rules:



1. Typed, double-spaced: TIMES NEW ROMAN, 12 font, including title
2. Heading: 4 lines - UPPER LEFT corner
Student name: "Sammy Gompers"
Teacher name: Ms. Teacher
Course name, period: English I, Period 3
Date 06 February 2009
3. All pages numbered: upper right corner, last name and page number; no punctuation, no "p." or "pg."
4. Title: centered, upper and lower case
5. Work Cited/ Documentation Format: It is necessary to credit any source that is used in a paper or project. Plagiarism is considered cheating. All sources must be documented. Citing sources in a paper must be thorough and accurate. MLA formatting for in text citations and works cited is mandatory

Important Dates:

Quarter 1:

- Q1 Finals Week: October 23rd and 27th
- Parent Conferences: October 23rd - 27th
- End Date: October 30th

Quarter 2:

- Q2 Finals Week: January 22nd - 26th
- Parent Conferences: January 16th - 22nd
- End Date: January 31st

Quarter 3:

- Q3 Finals Week: April 9th - 13th
- Parent Conferences: April 16th - 20th
- End Date: April 23rd

Quarter 4:

- Q4 Finals Week: May 29th - June 1st
- End Date: June 26th

Student Signature : _____ Parent/Guardian Signature: _____

Date: _____

