

Perris Union High School District

Course of Study

A. COURSE INFORMATION		
Course Title: <div style="border: 1px solid black; padding: 2px; margin-bottom: 5px;">Mathematical Thinking</div> <input checked="" type="checkbox"/> New <input type="checkbox"/> Revised	Subject Area: <input type="checkbox"/> Social Science <input type="checkbox"/> English <input checked="" type="checkbox"/> Mathematics <input type="checkbox"/> Laboratory Science <input type="checkbox"/> World Languages <input type="checkbox"/> Visual or Performing Arts <input type="checkbox"/> College Prep Elective <input type="checkbox"/> Other	Grade Level <input type="checkbox"/> MS <input type="checkbox"/> HS <input type="checkbox"/> 5 <input type="checkbox"/> 6 <input type="checkbox"/> 7 <input type="checkbox"/> 8 <input type="checkbox"/> 9 <input type="checkbox"/> 10 <input checked="" type="checkbox"/> 11 <input checked="" type="checkbox"/> 12
If revised previous course name if changed <div style="border: 1px solid black; height: 20px; width: 100%;"></div>	Is this classified as a Career Technical Education course? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	
Transcript Course Code/Number: <div style="border: 1px solid black; height: 20px; width: 100%;"></div> (To be assigned by Educational Services)	Credential Required to teach this course: <div style="border: 1px solid black; padding: 2px; margin-bottom: 5px;">Single Subject: Mathematics</div> <div style="background-color: yellow; padding: 2px; font-weight: bold; font-size: small;">To be completed by Human Resources only.</div> <div style="border: 1px solid black; padding: 2px; margin-bottom: 5px;"> Spide Gillon 6-5-21 </div> <div style="display: flex; justify-content: space-between; font-weight: bold; font-size: small;"> Signature Date </div>	
Required for Graduation: <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	Meets "Honors" Requirements? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	
Meets UC/CSU Requirements? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No Was this course <u>previously approved by UC for PUHSD?</u> <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No (Will be verified by Ed Services)	Meets "AP" Requirements? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	
Submitted by: Amanda Darton Site: SSC Date: 5/21/2021	Unit Value/Length of Course: <input type="checkbox"/> 0.5 (half year or semester equivalent) <input checked="" type="checkbox"/> 1.0 (one year equivalent) <input type="checkbox"/> 2.0 (two year equivalent) <input type="checkbox"/> Other:	
Approvals	Name/Signature	Date
Director of Curriculum & Instruction		6/4/21
Asst. Superintendent of Educational Services		6/7/21
Governing Board		

Prerequisite(s) (REQUIRED):
None
Corequisite(s) (REQUIRED):
Enrolled in Core Pathway (Algebra I, Geometry or Algebra II/Trig)
Brief Course Description (REQUIRED):
This course will expose the students to a variety of math topics through the lens of the standards of mathematical practices. Students will routinely work through real world situations where they will need to apply knowledge from prior/current courses to solve. In this course, students will not only be solving complex math problems, but they will also learn how to persevere through new learning, make connections between different topics, reason both abstractly and quantitatively, model thinking, use a variety of tools, use structure, make connections using repeated reasoning, construct arguments and critique others.

B. COURSE CONTENT
Course Purpose (REQUIRED): <i>What is the purpose of this course? Please provide a brief description of the goals and expected outcomes. Note: More specificity than a simple recitation of the State Standards is needed.</i>
Students in this course will make connections between the math taught in Algebra and Geometry to the real world. The students will work through the standards of mathematical practices by: persevering, make connections, reasoning both abstractly and quantitatively, modeling, using tools, making use of structure, using repeated reasoning, construct arguments, critique others all while solving a variety of complex math problems. Another goal of this course is to provide more time and support to master the content needed for Standards to be Met.
Course Outline (REQUIRED): <i>Detailed description of topics covered. All historical knowledge is expected to be empirically based, give examples. Show examples of how the text is incorporated into the topics covered.</i>
Students will... 1) Make sense of a variety 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

While using the essential standards from Algebra 1 and Geometry to enhance the learning.

Writing Assignments (REQUIRED):

Give examples of the writing assignments and the use of critical analysis within the writing assignments.

Writing assignments will include:

- Justifications and/or Explanations
- Arguments and Critiques
- Cornell Notes
- Assessments
- Projects/Performance Tasks
- Journals/Learning Logs – Reflections/Summaries
- Writing Prompts
- Other CFUs (i.e. Warm ups and Tickets out the Door)

INSTRUCTIONAL MATERIALS (REQUIRED)

Textbook #1

Title: Algebra 1 Student Edition

Edition:
First

Author: Charles, Hall, Kennedy, Bellman, Bragg, Handlin, Murphy and Wiggins

ISBN: 13: 9780133286618

Publisher: Pearson

Publication Date: 2015

Usage:

- Primary Text
- Read in entirety or near

Textbook #2

Title:

Edition:

Author:

ISBN:

Publisher:

Publication Date:

Usage:	
<input type="checkbox"/> Primary Text <input type="checkbox"/> Read in entirety or near	
Supplemental Instructional Materials <i>Please include online, and open source resources if any.</i>	
Tools for Teachers Website Interim Assessment Blocks - IABs and FIAB CAASPP - Practice Tests Performance Tasks - CAASPP released. Savvas and in Google Drive CAASPP Released Questions Savvas Algebra 1 and Geometry books	
Estimated costs for classroom materials and supplies (REQUIRED). <i>Please describe in detail.</i> If more space is needed than what is provided, please attach backup as applicable.	
Cost for class set of textbooks: \$ 0	Description of Additional Costs:
Additional costs:\$ 0	
Total cost per class set of instructional materials:	\$ 0

Key Assignments (REQUIRED):
Please provide a detailed description of the Key Assignments including tests, and quizzes, which should incorporate not only short answers but essay questions also. How do assignments incorporate topics? Include all major assessments that students will be required to complete
Key Assignments will include: <ul style="list-style-type: none"> ● End of Unit Assessments ● Daily/Lesson Quizzes ● Semester Benchmarks/Finals ● Performance Tasks/ Projects ● Homework ● Assessments from CAASPP ● Cornell Notes
Instructional Methods and/or Strategies (REQUIRED):
Please list specific instructional methods that will be use.
Instructional Strategies will include: <ul style="list-style-type: none"> ● Direct Instruction ● Targeted Feedback ● Reciprocal Teaching ● Collaboration ● Adapting to learning styles and multiple intelligences

- Realia
- Modeling
- Guided and Independent practice
- Partner/ Group work
- Spiraling
- Questioning strategies that look for participation and content understanding
- Notice and Wonder
- Specific and Targeted Vocabulary instruction

Assessment Methods and/or Tools (REQUIRED):

Please list different methods of assessments that will be used.

Assessment Methods will include:

- Teacher created or CAASPP Interim Assessments with Question types:
 - Open Response
 - Multiple Choice
 - Performance Assessment
 - Multiple select
- Performance Tasks
- Projects/Investigations
- Self-assessment
- Whiteboards
- Find the error
- Portfolios/"Notebooks"
- Ticket out the Doors
- MathXL assignments

COURSE PACING GUIDE AND OBJECTIVES (REQUIRED)

Day(s)	Objective	Standard(s)	Chapter(s)	Reference
30-50	Expressions and Equations <ul style="list-style-type: none"> ● Solve 2 step equations/inequalities ● Solve multi-step equations/inequalities ● Solve equations with variables on both sides ● Exponent Rules ● Combine like terms ● Polynomials ● Literal equations ● Creating equivalent expressions and equations 	HS.N.Q HS.A-SSE.1.a HS.ASSE.3c HS.A-APR.1 HS.A-CED.1-2 HS.A.CED.4		

30-50	Functions <ul style="list-style-type: none"> ● Proportional Relationships ● Linear functions ● Systems of equations and inequalities ● Quadratics ● Interpreting Graphs 	HS.A-SSE.3a HS.A-APR.3 HS.A-CED.3 HS.A-REI.6 HS.A-REI.10-1 2 HS.F-IF.1-2 HS.F-IF.4-7a HS.F-IF.9 HS.F-LE.1		
20-40	Geometry <ul style="list-style-type: none"> ● Transformations ● Thrms. Of Lines and Angles ● Prove Thrms about triangles ● Area and Volume (composite) 	HS.G-CO.2 HS.G-CO.4-8 HS.G-CO.9 HS.G-SRT.1a HS.G-SRT.2 HS.G-SRT.5 HS.G-GMD.3		
20	Statistics and Probability <ul style="list-style-type: none"> ● Represent data sets in different ways ● Compare and Interpret 2 data sets ● Lines of best fit ● Correlation vs. Causation ● Unions and Intersections 	HS.S-ID.2-3,5,6 c HS.S-ID.9 HS.S-CP		

C. HONORS COURSES ONLY

Indicate how much this honors course is different from the standard course.

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D. BACKGROUND INFORMATION

Context for course (optional)

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History of Course Development (optional)

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