



# **Math Department Curriculum Review Update 2018-19**

**HERRICKS SCHOOL DISTRICT**

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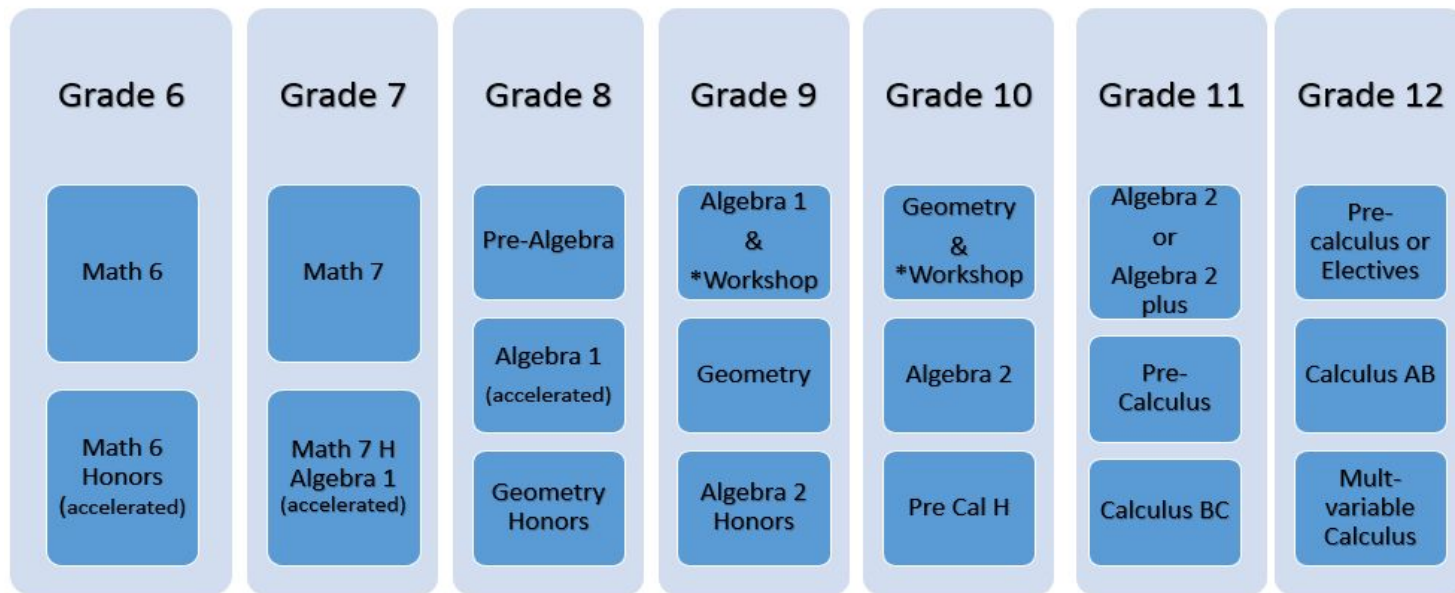
# Herricks Math Education Philosophy

All students are encouraged to:

- Develop critical thinking and problem solving abilities
- Integrate, discover and create within a student centered environment
- Appreciate the beauty of mathematics and study the relevance of application across disciplines
- Experience a rigorous and challenging curriculum at all levels

# MATHEMATICS DEPARTMENT

Flow Chart 2017-18



\*Workshop for Math Support

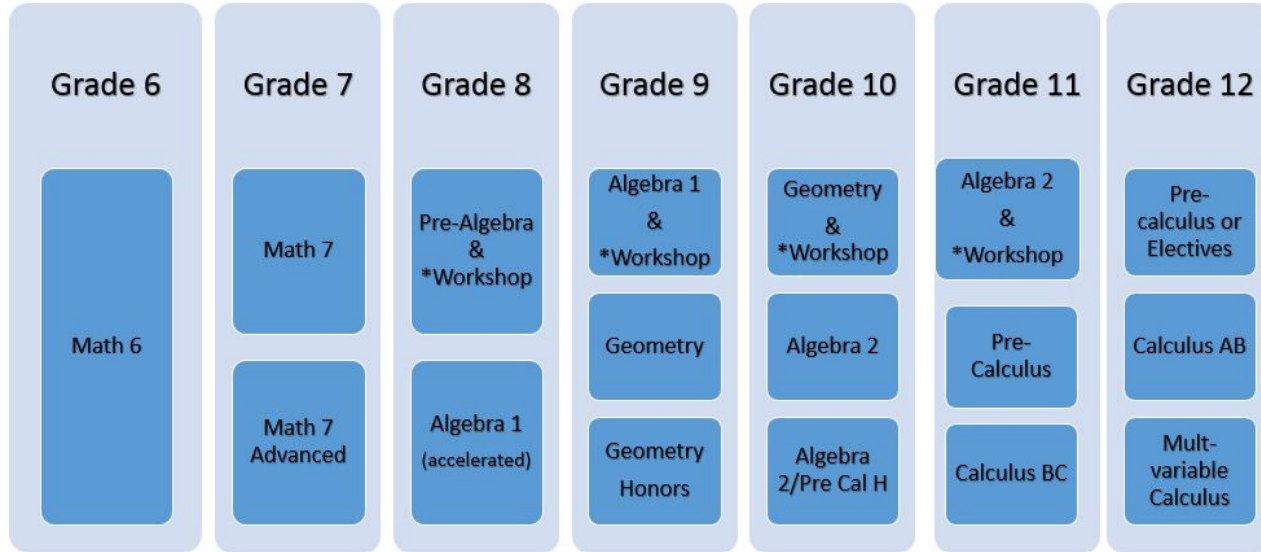
## MATH ELECTIVES

Grade 9- Math Research Beginner, Computer Science I

Grade 10- Math Research Advanced, Computer Science II

Grade 11 and 12- AP Computer Science, AP Statistics and Topics in Math

MATHEMATICS DEPARTMENT  
Flow chart 2018-19



\*Workshop for Math Support

MATHELECTIVES

Grade 9- Math Research Level 1, Computer Science I, Computer Science II

Grade 10- Math Research Level 2, CS Principles AP, Computer Science I, Computer Science II

Grade 11 and 12- Math research Level 3, College Algebra, AP Computer Science, AP Statistics and Topics in Math



# What changes and what stays the same?

## Same...

- Two years of acceleration is still an option for students in the Math program 6-12
- Multivariable calculus is the highest math course
- Students are provided with rigorous, challenging curriculum at all levels

## Changes...

- All students in Grade 6 are grouped heterogeneously
- Acceleration begins in grade 7; double acceleration option at the high school level
- Flexibility in movement from advanced Math 7 to Math 7 and vice versa
- Students/ parents decide in HS about math pathways
- More options available for advanced coursework at the high school level



# Preparing for the Shift ...Best Practices

- Growth mindset
  - Perseverance
  - self-confidence
- Instructional practices
  - Flip classroom
  - Complex instruction
- Instructional Resources
  - Technology
  - Textbooks
  - Web resources
- Math clubs and Competitions
  - Math Fair
  - Math Olympiads
  - Noetic math
  - MathCON
- STEAM
  - Integrated interdisciplinary to develop problem solving
  - Field trips
  - Innovation Lab
  - After school activities

# Implementation Timeline

2017-18	Curriculum Revisions Teacher preparation
2018-19	All students in grade 6 are heterogeneously grouped Complex teaching and enriched curriculum
2019-20	Math 7 advanced will be offered to 80-85 % of students Compacted curriculum from math 7 and 8 standards
2020-21	Algebra 1 will be offered to 80-85 % of grade 8 students Compacted grade 8 math and Algebra 1 curriculum. 1st year of acceleration.
2021-22	Geometry H offered to students who have strong interest and ability in Math. Compacted curriculum includes trigonometry topics.
2022-23	Algebra2/Precal H offered for 2nd year of acceleration. Compacted Algebra 2 and precalculus curriculum



# Questions

Thank you !