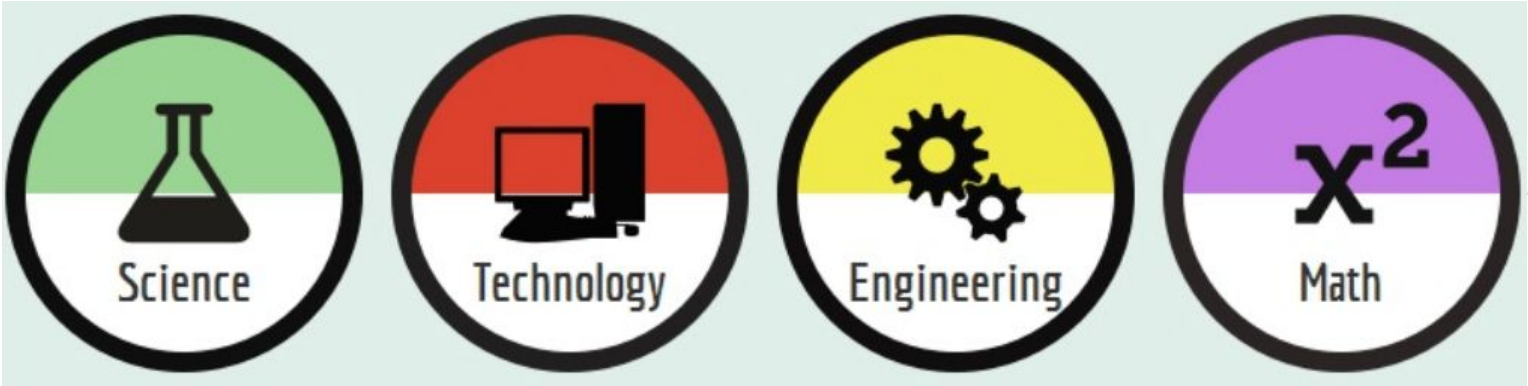
Welcome Parents!

Class of 2029
Orientation Night

Joyce Thornton Barry
Science, Research & Engineering Chair K-12

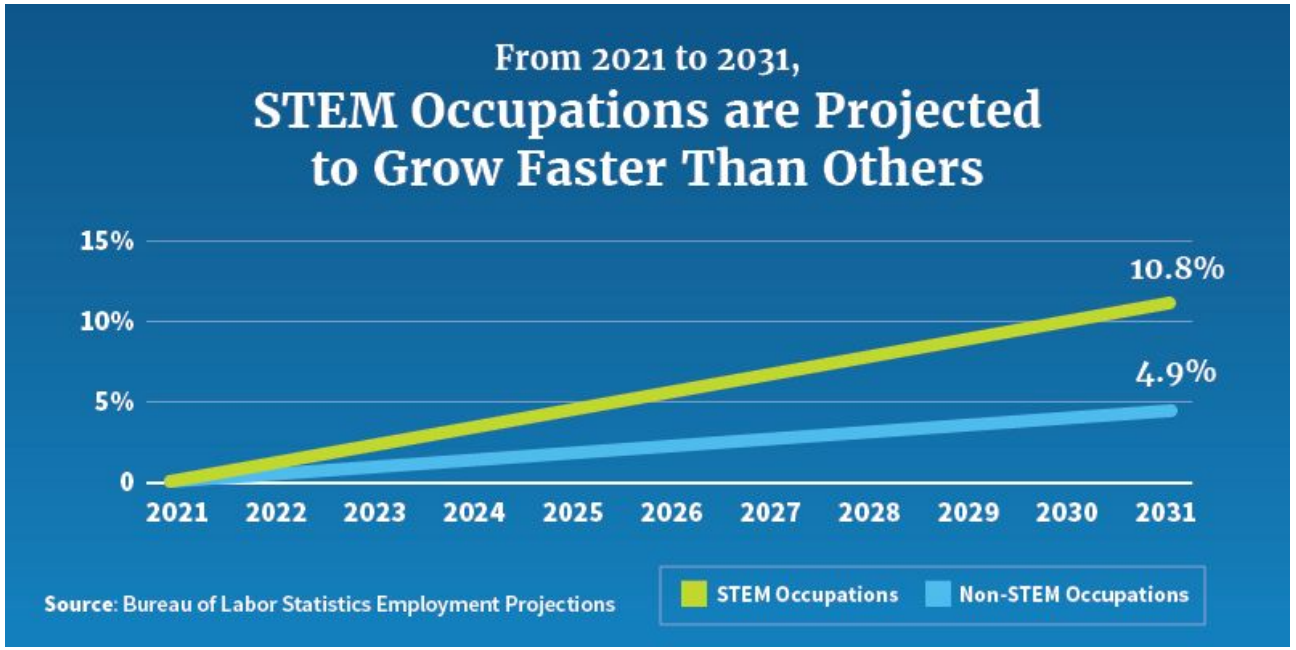
Regina Lee
Mathematics Chair K-12

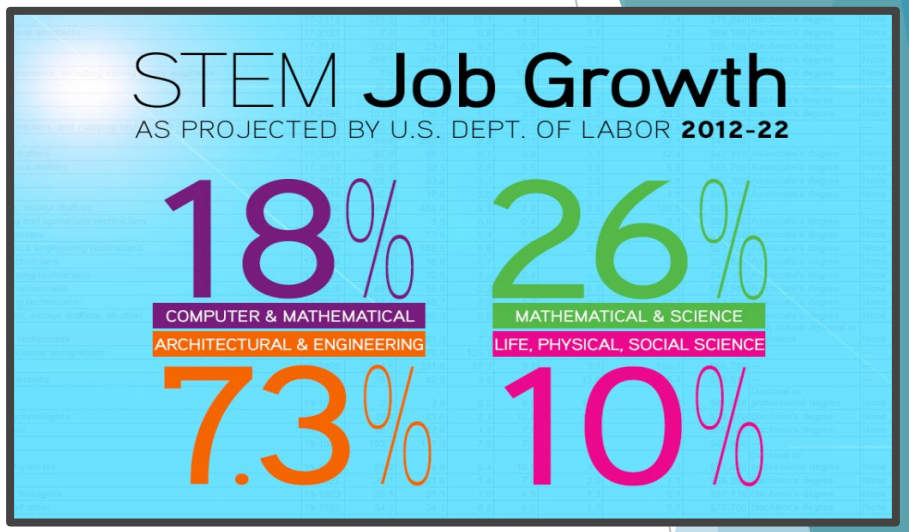
What STEM skills do you think your child will need to be successful in the future?

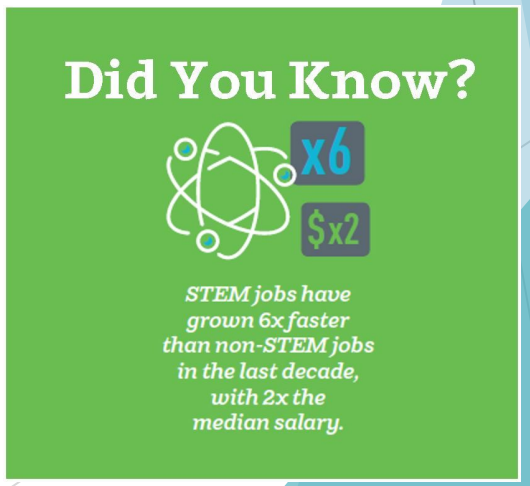


Preparing our students for the FUTURE!

STEM Careers







https://www.youtube.com/watch?v=U8qay62uusg
run to 1:55

9th Grade Course Options in Science

- Earth and Space Science
- Life Science:Biology
- Pre-AP Biology
- LEAPES (Biology/Advanced Placement Environmental Science)

9th Grade Elective Options in Science

- Foundations of Research (Honors)

Science 2025-2026

Suggested Course Map For Science

Grade 8	Grade 9	Grade 10	Grade 11	Grade 12
Science 8	Regents Earth & Space Science	Regents Biology	Regents Chemistry	Regents Physics
Accelerated Regents Earth & Space Science	Pre-AP Biology	Honors Chemistry	AP Physics 1	AP Science/Science Elective
Accelerated Regents Earth & Space Science	LEAPES*	CHAPS**	AP Physics 1 & 2	AP Science/Science Elective

- **Regents exam requires the successful completion of 1200 lab requirements.**
- **All students taking an AP class must take the AP examination.**

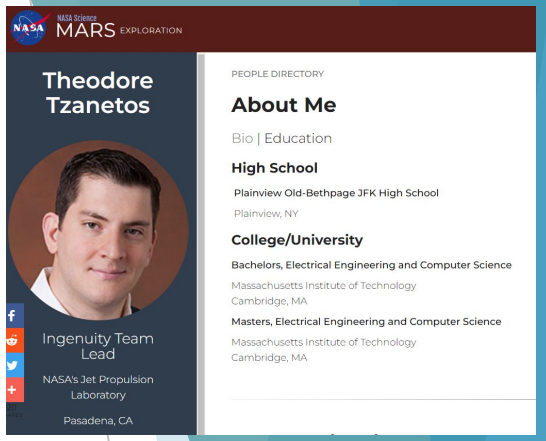
*Living Environment + AP Environmental Science
- Must take biology regents in June and AP ES exam in May

** Chemistry Honors + AP Chemistry
- Must take chemistry regents in June and AP Chemistry exam in May.

Science Electives		
Non-Regents	**College Credit**	**AP**
• Applied Science • Astronomy • Biotechnology/DNA Science • Careers in Engineering • Forensics	• Anatomy & Physiology (LIU) • College Engineering (Hofstra) • EMT (NYS) • Health Related Careers (LIU)	• AP Biology • AP Chemistry • AP Environmental Science • AP Physics 1 • AP Physics 2 • AP Physics C

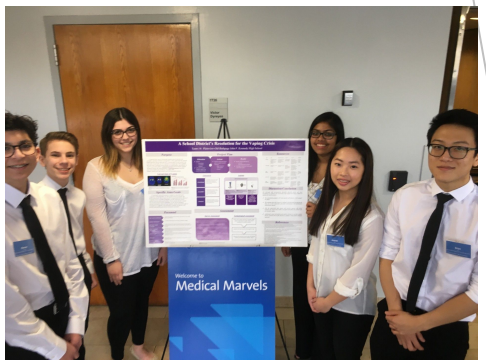
Research teaches life long skills…

"I have an eleven page chem lab write up that needs to be finished in 6 hours. I just started 4 hours ago. It's 4:16 am and I'm tired. I would not be able to do this if I hadn't wrote Intel. Just thought you'd get a smile out of this." -Cassidy, UC Berkley

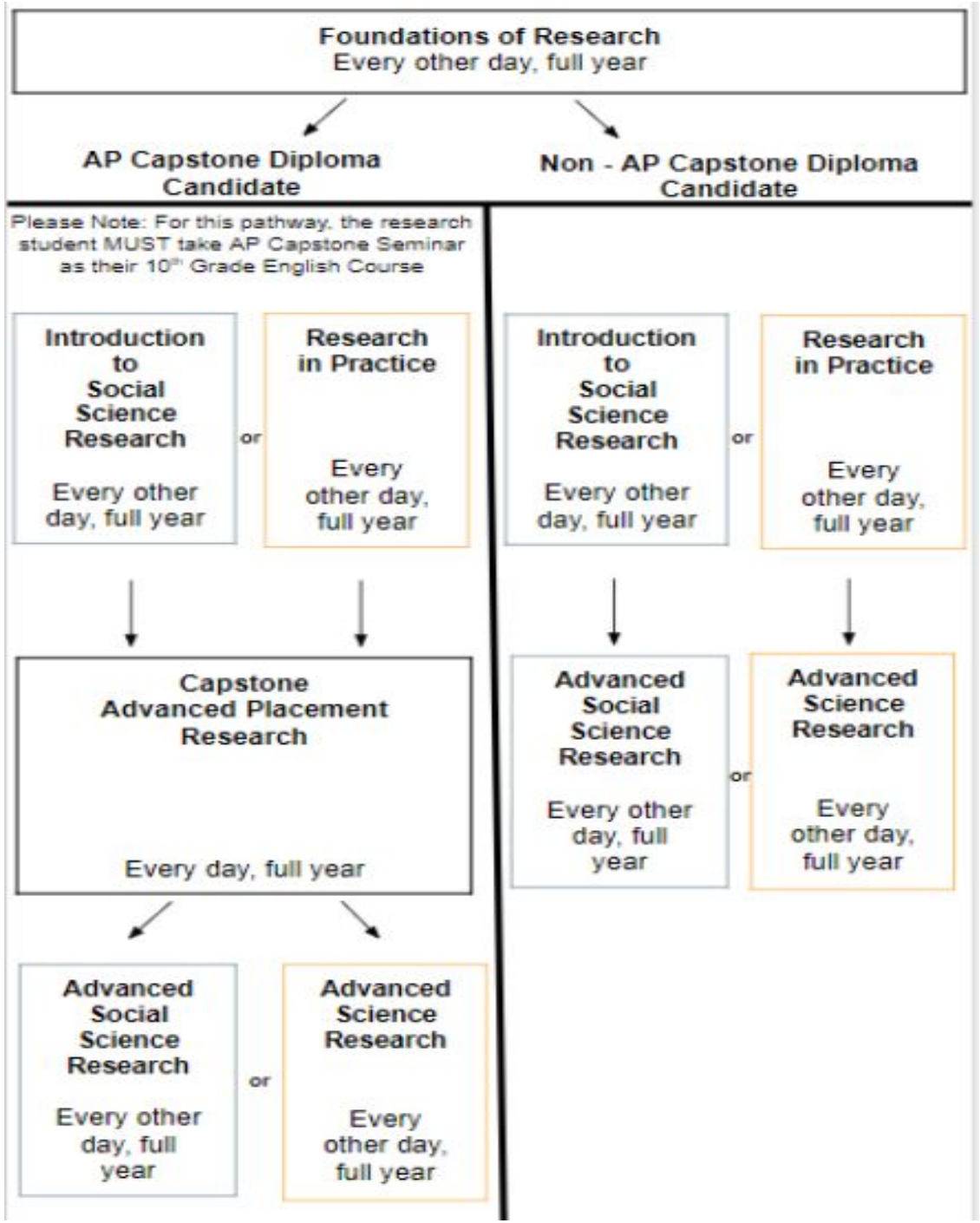


New 9th Grade Foundations of Research Program

- Grade Level Specific
- Interdisciplinary
- Setting Foundation for AP Capstone – QUEST
- Skills:
  - Developing a resume
  - Written and Oral Presentation Skills
  - PowerPoint/Statistics
  - Working and learning independently and Collaboratively
  - Time management: Adhering to deadlines
  - Searching the internet/databases for journal articles



Research Pathways 2025-2026



Technology

Design & Draw For Production**

Meets NYS Technology, Art, or Music Graduation requirement

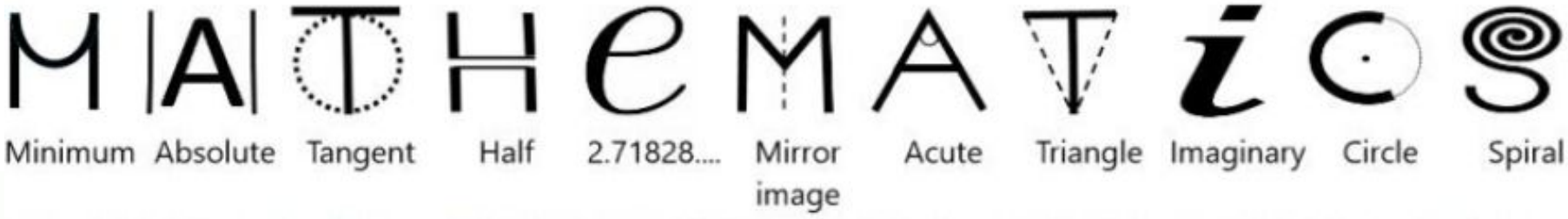
Grade	CTE Pathway Engineering	CTE Pathway Architecture	CTE Pathway Video Production
9-12	DDP**	Architecture 1**	Video Production 1**
10-11	Robotics**	Architecture 2**	Video Production 2**
11-12	College Engineering** (Prerequisite = Robotics & Algebra II)	College Architecture**	College Video Production**

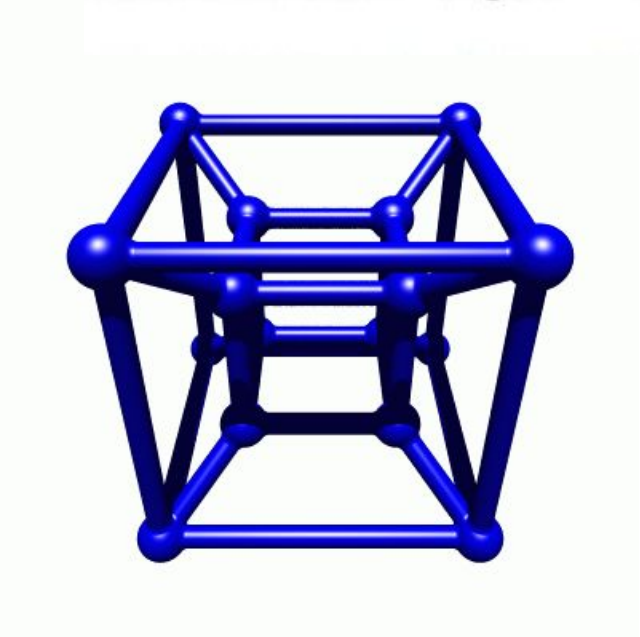
ELECTIVES

- Computer Repair 1*
- Computer Repair 2*
- Modern Manufacturing*
- Aeronautics** — To be offered 2026-2027
- Careers in Engineering* — To be offered 2026-2027

1/2 Credit *
1 Credit **

Class of 2028 Orientation Night



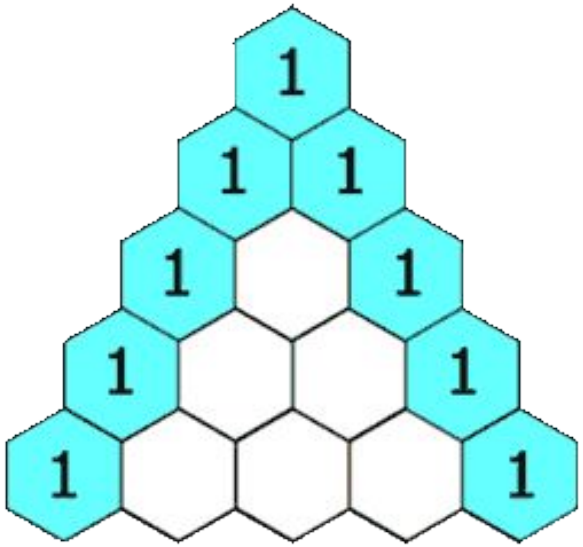


Regina Lee
Mathematics Chairperson, K-12

MATHEMATICS

9th Grade Course Options in Math

- Algebra 1
- Algebra 1 with Lab
- Geometry
- Geometry Honors

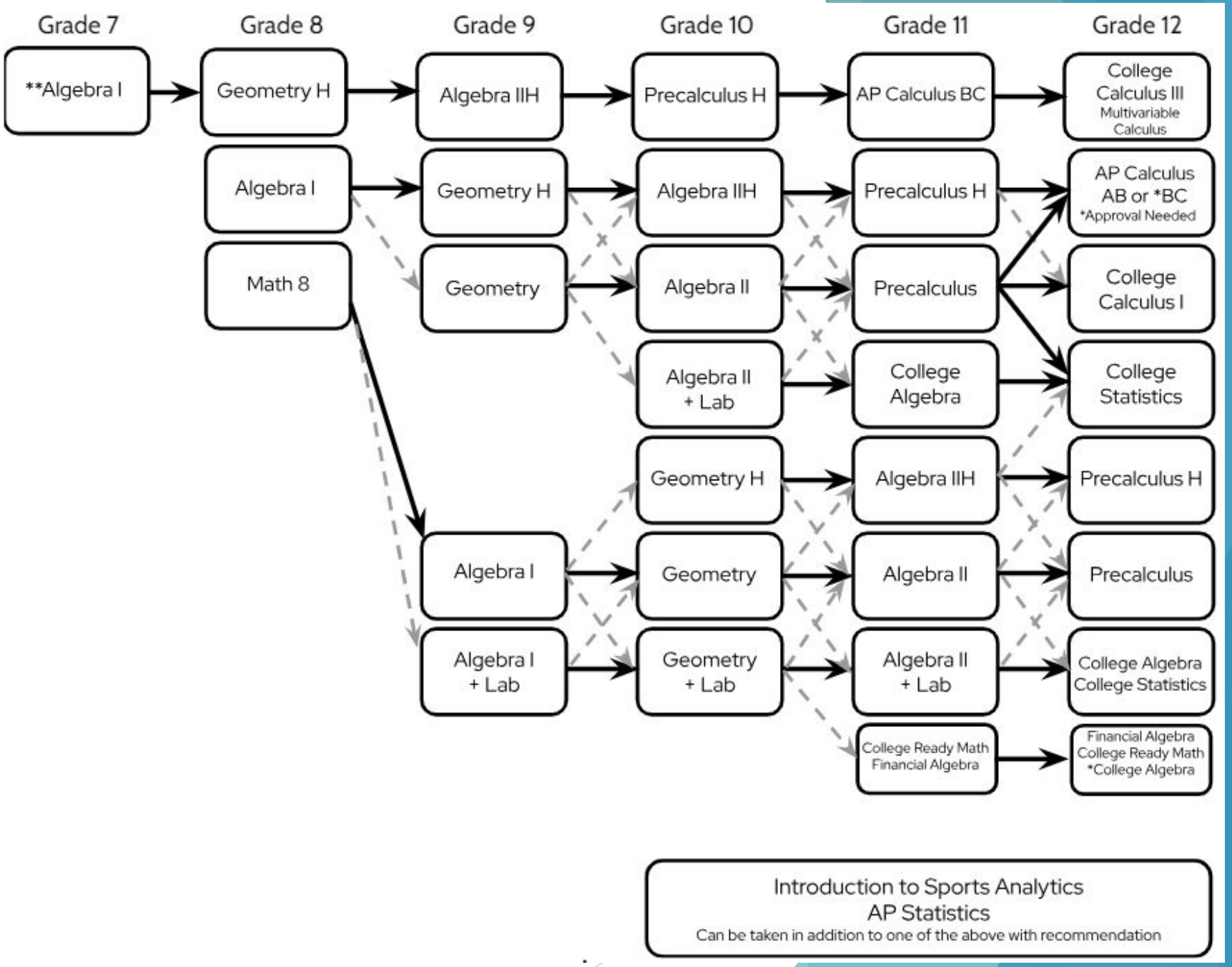


9th Grade Elective Options in Math

- Intro to Computer Science

Mathematics Department Flow Chart

Math Courses

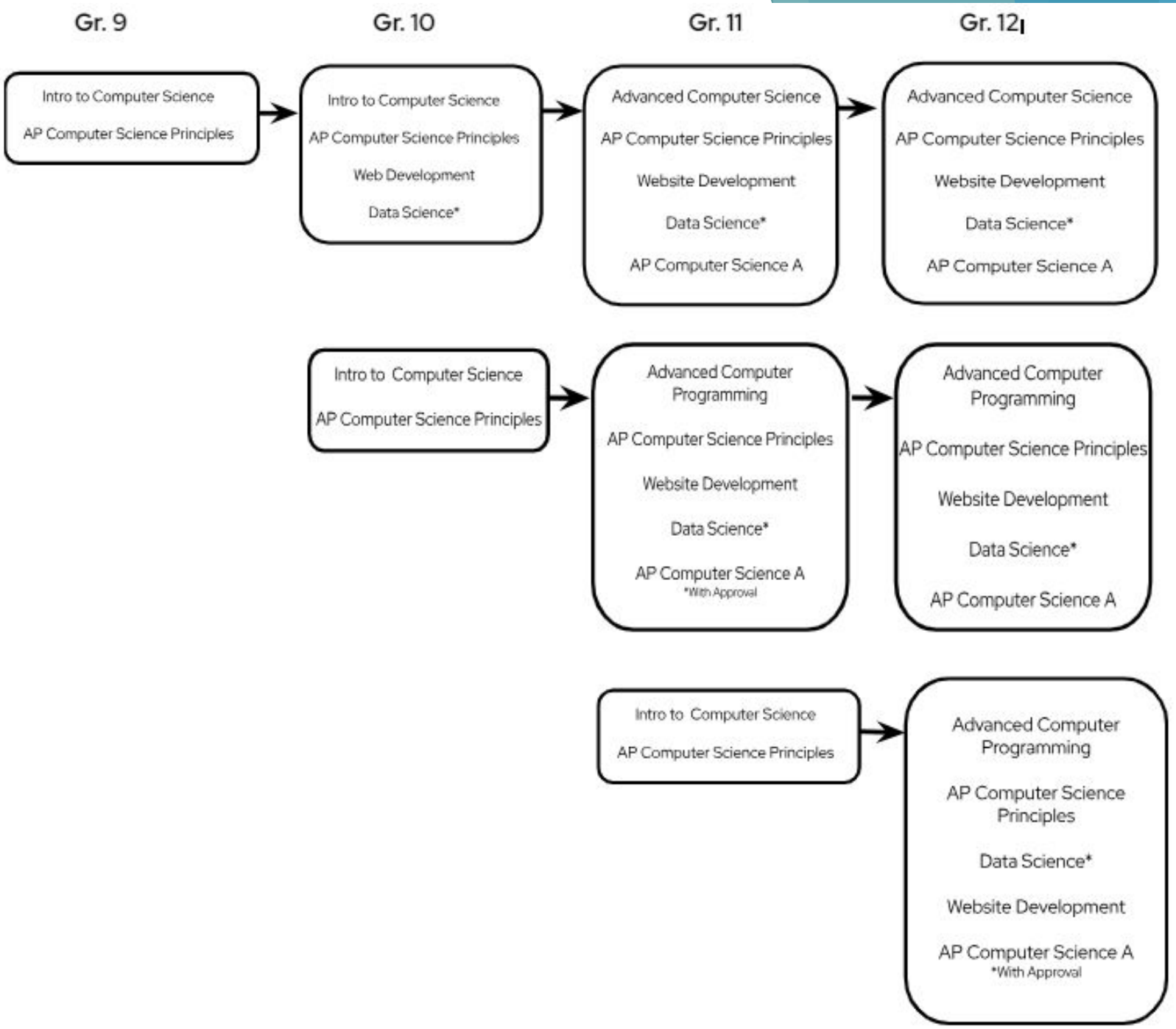


Computer Science Electives 9-12

- Intro to Computer Science
- AP Computer Science Principles
- Advanced Programming
- Data Science
- Website Development
- AP Computer Science A

Mathematics Department Flow Chart

Comp Sci Courses



Thank you for attending!

Any questions? Please call or send an email.

Joyce Thornton Barry

Science, Research & Technology Chair K-12

jbarry@pobschools.org

(516) 434-3191

Regina Lee

Mathematics Chair K-12

reglee@pobschools.org

(516) 434-3197