



**Welcome to 8th Grade Parents' Night!**

**Science & Mathematics/Computer  
Science/Business**

**January 17, 2023**

# Mathematics



- Mr. Matthew Aurand

6 - 12 Supervisor Mathematics, Business, and  
Computer Science

Email : [maurand@spfk12.org](mailto:maurand@spfk12.org)

Phone: 908 - 889 - 8600 ext 31410

# 9th Grade Mathematics



## Courses available to 9th Grade Students:

- Algebra 1
- Algebra and Analytic Geometry Accelerated
- Algebra and Analytic Geometry Academic

Elective: Computer Programming

# 9th Grade Mathematics



9th Grade courses are recommended using the following criteria:

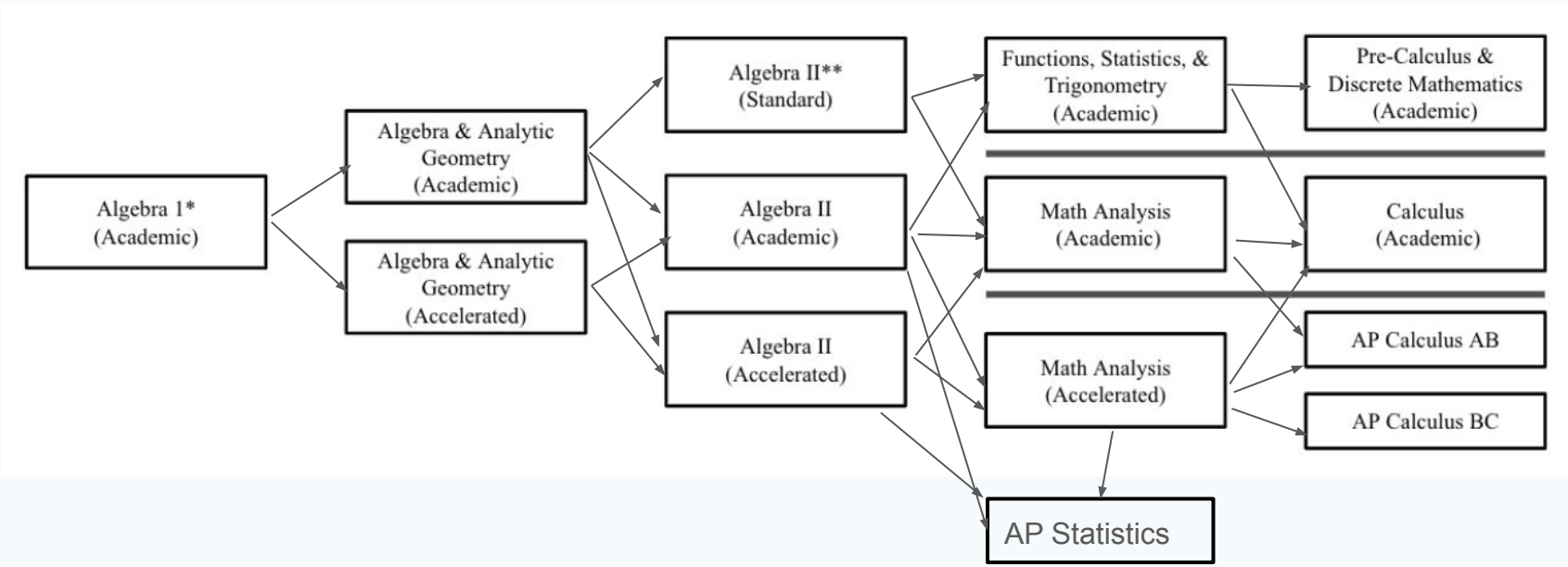
- Marking Period 1 - 3 Grade
- Winter Math MAP RIT
- NJSLA
- Teacher Rubric
- Student Self Assessment

# Students in accelerated courses...



- Possess exceptional self-direction, initiative, and perseverance
- Are highly organized and possess excellent time-management skills.
- Analyze, evaluate and synthesize more complex and in depth concepts.
- Are expected to complete more independent work at home.
- Will have shorter timelines for project completion.
- Will be expected to analyze more difficult texts, often independently.
- Are expected to make sophisticated connections between concepts.
- Are motivated to apply what they learn beyond the classroom.
- Have genuine interest in the subject and the work associated with it.

# 9th Grade Mathematics



# Graduation requirement



## Credit Requirements

- Algebra 1
- Geometry
- Third year of math that builds on Algebra & Geometry & prepares students for college & 21st century careers

## Assessment

Students must take and demonstrate proficiency in grade 11 on the New Jersey Graduation Proficiency Assessment which, in Math, assesses Algebra 1 and Geometry.

# Computer Science



## Computer Programming

- Grades 9 - 12

## AP Computer Principles

- Grades 10 - 12

## AP Computer Science A

- Grades 10 - 12
- Prerequisite: Computer Programming





- Ms. Guida Faria

K-12 Supervisor Science, Engineering and Gifted & Talented

My apologies for not being with you today due to a prior commitment. If you have any questions or concerns about science, please feel free to contact me:

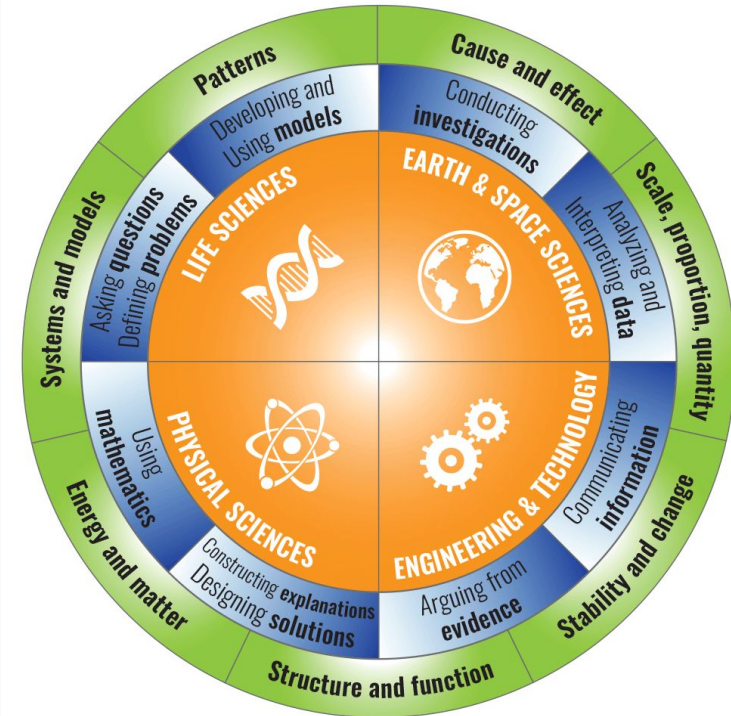
Guida Faria  
gfaria@spfk12.org  
(908)889-8600 ext. 31405



# Science Philosophy



Aligned with the vision of NGSS, SPF science is focused on all standards for all students. Instruction is focused on having students as the ‘doers’ of science to figure out a phenomena or designing a solution for an engineering problem.



# Science

# Course

# Progression



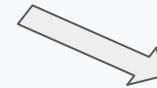
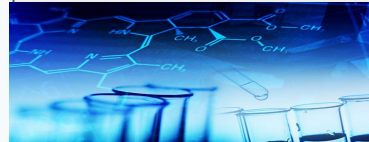
## 9th Grade

### Biology I



## 10th Grade

### Chemistry I



## 11th Grade

### Physics I



- or -

### Environmental Science



- ❖ Levels for core science classes are *Academic* or *Accelerated* with the exception of Environmental science which is Academic or AP.
- ❖ Special education support classes are available for all core science classes.

# Science Elective Opportunities



## 10th Grade

- ❖ Astronomy
- ❖ Biology II AP
- ❖ Environmental Science (AP)
- ❖ Nutrition Science

## 11th Grade

- ❖ Chemistry II AP
- ❖ Anatomy & Physiology
- ❖ Forensic Science
- ❖ Zoology

## 12th Grade

- ❖ Physics II AP

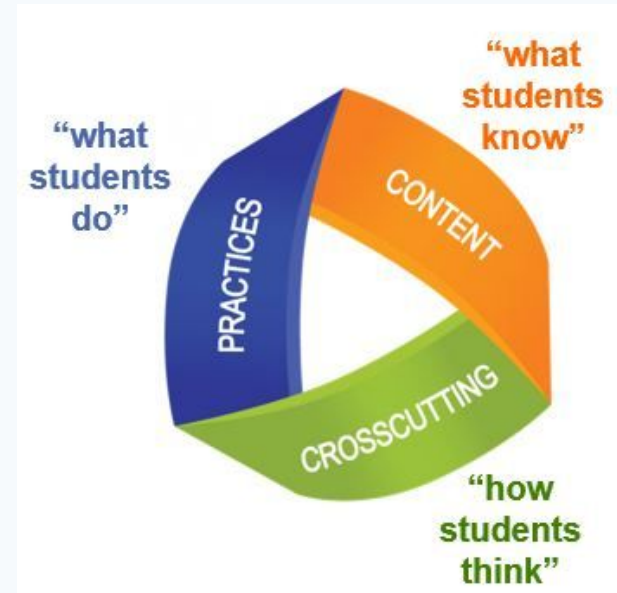


# NJSLA- Science



All 11th graders must take the New Jersey Student Learning Assessment in Science in 11th grade.

- **Disciplinary Core Ideas**
  - Life Sciences
  - Physical Sciences
  - Earth & Space Science
  - Engineering & Technology
- **Crosscutting Concepts**
- **Science & Engineering Practices**



# Thank you!!!



**Guida Faria**

gfaria@spfk12.org  
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**Matthew Aurand**

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