




# **An Introduction to The Complete STEM Experience at HIGH POINT REGIONAL HIGH SCHOOL**

**Eighth Grade Open House  
January 7, 2016**

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Supervisor of STEM  
Science, Technological Studies, Business & Mathematics**

# HIGH POINT STEM – The 9<sup>th</sup> Grade Experience

Science	Tech Studies	Business	Mathematics
Environmental Science A/B	Principles of: <ul style="list-style-type: none"> <li>• Mechanical Movement</li> <li>• Engineering Design</li> <li>• Media Tech</li> <li>• Eng. Drawing</li> </ul>	21 <sup>st</sup> Century Skill Seminar for ALL 9 <sup>th</sup> Graders 	Math Concepts and Applications (First Half of Algebra I)
Biology Honors	<b><i>Architecture</i></b>	<b><i>Intro to Business</i></b>	Algebra I Honors
Bio A	<b><i>Computer Aided Design</i></b>	<b><i>Intro to Computer Science</i></b>	Algebra I A
	<b><i>Computer Animation</i></b>	<b><i>Entrepreneurship</i></b>	Geometry Honors
	<b><i>Material Processing</i></b>	<b><i>Accounting 1</i></b>	Geometry A
	<b><i>Biotechnology</i></b>	<b><i>Principles of Marketing</i></b>	
	<b><i>Women in Engineering</i></b>	<b><i>Fashion Marketing</i></b>	
	<b><i>Communication Tech.</i></b>	<b><i>Advertising and Sales</i></b>	
	<b><i>Power, Energy, Transportation</i></b>		
	<b><i>Media Technology</i></b>		

# HIGH POINT STEM – Science

## EXPECTATIONS FOR BIOLOGY HONORS

Expectations:	Maturity, good work ethic, good writing skills, can handle quite a bit of homework, summer homework, responsible
Long Term Project:	Independent Project-Starts with hypotheses in September and ends with final project in June.
Pathway for:	Serious STEM student, more options for AP classes

## EXPECTATIONS FOR BIOLOGY A

Expectations:	Meeting deadlines, class moves at faster pace than Environmental Science, mature, prepared, motivated to learn
Long Term Project:	Service Learning Project
Pathway for:	Exploring more science options at High Point

9<sup>th</sup> graders who start in Environmental can still get on an Honors track.

9<sup>th</sup> Graders in the AP Physics I Pilot MUST also be enrolled in Geometry Honors

HIGH POINT STEM

Science, Technological Studies, Business and Mathematics



# HIGH POINT STEM – Early Integration

## 21<sup>st</sup> Century Skills Seminar

(Critical Thinking, Problem Solving, Interpersonal Communication Skills, Presentation Skills, Introduction to Coding, Google Apps, Teamwork, Career Exploration, Digital Citizenship)

&

*Principles of  
Engineering  
Design  
Technology  
(TEC656)*

*Principles of  
Engineering  
Drawing  
(TEC658)*

*Principles of  
Mechanical  
Movement  
(TEC655)*

*Principles of  
Media  
Technology  
(TEC657)*

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# HIGH POINT STEM – Mathematics

## Math Concepts and Applications

- First half of Algebra I
- Algebra I would be taken as a 10<sup>th</sup> Grader

## Algebra 1

- Offered as A and Honors level
- *Algebra I Honors* – critical thinking, extensive use of graphing calculator, deeper and more enriched exploration of problems
- ***ALGEBRA I IS THE FOUNDATION FOR SUCCESS***

## Geometry

- Offered as A and Honors level
- Students from both Algebra I and Geometry will take Algebra II beginning in 10<sup>th</sup> Grade
- Students can take two Math courses in Grade 9



# HIGH POINT STEM – Why High Point?

## The Hour of Code

- 725 students and 25 teachers from multiple departments

## New Jersey STEM League

- Original participant in event to formally integrate Math and Science concepts into Design and Problem Solving

## Dynamic Electives

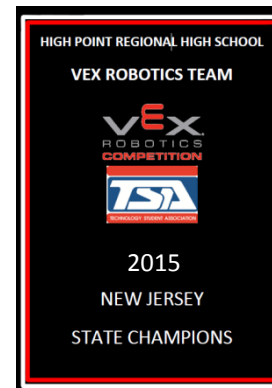
- Forensics, Geology, Marine Science
- Unrivalled variety in Technological Studies and Business
- Honors electives in Science Research, Accounting, Engineering, CADD, Media, and Architecture
- Nationally recognized in Media, Technological Studies, and Business

## AP

- Calculus AB/BC, Statistics
- Environmental Science, Biology, Chemistry, Physics 1/2/C
- Computer Science Principles, Computer Science
- Capstone (one of only 5 in NJ)

## Competitive Event Success

- DECA, FBLA, TSA, VEX Robotics



# HIGH POINT STEM – By June 2020

A Diverse Exploration of **Science**.  
Creativity and Innovation in **Technological Studies**.  
A Real World Understanding of the **Business** World.  
Practical Applications and Mastering the Skills of **Mathematics**.

Please Feel Free to Contact Me with Any Questions:

Brian Drelick

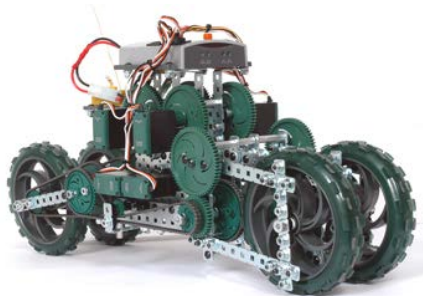
[bdrelick@hpregonal.org](mailto:bdrelick@hpregonal.org)

973-875-3101 Ext. 1329

Join Us this Saturday, January 9<sup>th</sup> for the VEX Robotics Regional Tournament  
@ High Point.

8 am -5 pm

FREE



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