

STEM Program for Innovation, Rigor, and Excellence

### 9th Grade

### 10th Grade

### 11th Grade

#### 12th Grade

Year-long Honors/Gifted

<u>Biology</u> integrated with

<u>Language Arts</u> and

<u>Oral/Written</u>

<u>Communication</u>

Or

Honors/Gifted Chemistry
with embedded
Foundations of
Engineering

Year-long H/G <u>Chemistry</u> integrated with <u>Language Arts</u> and <u>Foundations of</u> <u>Engineering</u>

Or

AP Biology with embedded Scientific Research

Year-long H/G <u>Physics</u> with embedded <u>Concepts/Application of</u> <u>Engineering</u> or <u>Mechatronics</u>

Or

AP Physics C with embedded Concepts and Applications of Engineering

AP Biology, **AP Chemistry**, AP Physics, Robotics, **Advanced Scientific** Research. Mechatronics/AP **Computer Science Principles, Anatomy &** Physiology/Essentials of **Health Sciences. Forensics Science,** AP Environmental Science

# Is SPIRE the right fit?

## Do you like to...

- Work collaboratively to find solutions to real-life problems?
- Think of new ways to do things or come up with outside of the box ideas?
- Guide your own learning?
- Read stories and articles related to other things that you are learning or that you care about?
- Present your findings in new and different ways?
- Engage in scientific inquiry?

If you answered "yes" to these questions, SPIRE may be for you!

# **SPIRE Approach**

## **Focus on Project Based Learning**

Students work individually, in pairs, and in small teams **during class time** to engage in multiple interdisciplinary projects throughout the year, providing a unique learning experience. These projects will allow students to experience the world as it exists outside of classroom walls.

## **Integration across Content Areas**

Class activities and projects will allow students to work on mastery of skills and standards for multiple content areas. This allows for class experiences to have greater relevance to the student.

## **Emphasis on 21st Century Skills**

SPIRE students explicitly practice and improve their 21st century skills such as critical and creative thinking, collaboration, communication, leadership development, and technology skills.

## How does a year-long class work into my schedule?

#### A Typical 9th Grade Schedule

<u>Fall</u> <u>Spring</u>

1st Block: Math 1st Block: Biology

2nd Block: AP Human Geography 2nd Block: AP Human Geography

3rd Block: PE/Health 3rd Block: Elective

4th Block: Elective 4th Block: Language Arts

#### A 9th Grade SPIRE Biology/Language Arts Schedule

<u>Fall</u> <u>Spring</u>

1st Block: H/G Biology/Lang. Arts
2nd Block: AP Human Geography
2nd Block: AP Human Geography
2nd Block: AP Human Geography

3rd Block: PE/Health 3rd Block: Elective 4th Block: Elective 4th Block: Math

#### A 9th Grade SPIRE Chemistry Schedule

<u>Fall</u> <u>Spring</u>

1st Block: Math 1st Block: H/G Chemistry/Engineering

2nd Block: AP Human Geography 2nd Block: AP Human Geography

3rd Block: PE/Health 3rd Block: Elective

4th Block: Elective 4th Block: Language Arts

# Which SPIRE path is right for me?

### **SPIRE Biology/Language Arts**

- Science and engineering focus
- Year-long, slower pace
- Language arts integrated into science
- Project-based, collaborative learning
- Leads to AP level science, only if desired, beginning 11th grade year

### **SPIRE Chemistry**

- Science and engineering focus
- Rigorous, fast-paced
- Science fair and independent research
- No language arts component
- Project-based, collaborative learning
- Leads to AP level science courses, beginning 10th grade year

# What do students have to say about SPIRE?

