

Pelham High School Life Sciences STEM Pathway

Why choose the Life Sciences Pathway?

Students should participate in the Life Sciences Pathway if they have an interest in careers related to the study of life and organisms. The Life Sciences Pathway is designed to prepare students for a career focusing in field and laboratory research.

Is this the career path for you?

- Do you enjoy science?
- Do you enjoy research, experiments, or analyzing samples?
- Are you fascinated by life and all its scientific processes?

"In biology, nothing is clear, everything is too complicated, everything is a mess, and just when you think you understand something, you peel off a layer and find deeper complications beneath"

--Richard Preston

Why should I sign-up for the Life Sciences Pathway?

The Life Sciences Pathway will provide you with the following benefits:

- ✓ Opportunity to take college courses and earn early college credits.
- ✓ Assist you defining your educational and career goals <u>prior</u> to high school graduation.

...It is never too early to think about your future!

According to the U.S. Department of Labor, long-term projections for Life Sciences careers to 2030 are as follows:

| e of Growth | Educational Experience |
|-------------|--|
| 20% | High School Diploma |
| 21% | Associate Degree |
| 14% | Bachelor Degree |
| 5% | Bachelor Degree |
| 1% | Bachelor Degree |
| 6% | Bachelor Degree |
| 7% | Bachelor Degree |
| 16% | Master's Degree |
| 7% | Doctoral or Professional Degree |
| 20% | Doctoral or Professional Degree |
| | 20% 21% 14% 5% 1% 6% 7% 16% 7% |

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What courses am I required to take?

Students in the STEM Pathway are required to follow a sequence of three (3) academic courses that must include the following:

Choose Three (3) Required Courses

| STEM Pathway Requirements | Recommended Year | | | | |
|---|------------------|----|----|----|--|
| | 9 | 10 | 11 | 12 | |
| STEAM: Simple Machines (.5 credit) | Χ | Х | | | |
| Spreadsheet: Excel (<i>College Credits Available</i>) | | | Х | Х | |
| Statistics (College Credits Available) * | | | Х | Χ | |
| Pre-Calculus | | | Х | Х | |
| Physics | | | Х | Х | |

^{*} Indicates that students have the option to sign up for either the college course or the non-leveled course.

In addition to the above courses, students in the pathway will follow a sequence of required courses.

Option #1

| Choose Three (3) Elective | Recommended Year | | | |
|----------------------------|------------------|----|----|----|
| Courses | 9 | 10 | 11 | 12 |
| Biochemistry | | | Χ | Χ |
| Marine Biology (.5 credit) | | | Χ | Χ |
| Zoology (.5 credit) | | | Χ | Χ |
| Exercise Physiology | | Χ | Χ | Χ |
| Anatomy and Physiology | | | Χ | Χ |
| AP Biology | | | Χ | Χ |
| AP Environmental Science | | | Χ | Χ |

Option #2

| Required Courses | Recommended Year | | | |
|---|------------------|----|----|----|
| | 9 | 10 | 11 | 12 |
| Anatomy and Physiology | | | Χ | Χ |
| + CTE Program at Pinkerton Academy | | | | |
| Introduction to Animal Science | | | Χ | |
| (Pinkerton CTE Program) | | | | |
| Animal Management (Pinkerton CTE | | | Χ | |
| Program) | | | | |
| Animal Health and Veterinary | | | | Χ |
| Technology (Pinkerton CTE Program) | | | | |
| Or + CTE Program at Alvirne High School | | | | |
| Veterinary Science I (Alvirne CTE | | | Χ | |
| Program) | | | | |
| Veterinary Science II (Alvirne CTE | | | | Χ |
| Program) | | | | |

What are the honor cord requirements for the STEM pathway?

An honor cord signifying your academic achievement in the STEM Pathway will be awarded to students who complete the following requirements:

- Completion of required and elective courses in the STEM Pathway with an overall 3.0 GPA
- Minimum overall 2.5 GPA in all high school courses