# **BIOTECHNOLOGY PATHWAY**



### **Required Classes:**

#### Level 1: 9th & 10th Grade

STEM Inquiry Lab
Careers in Life Sciences
Biology

2.5 credits 2.5 credits 5 credits

# **Optional Recommended Classes:**

- Health & Wellness
- Nutrition
- Intro to Computer Science: Apps, Robots, and Python (PLTW)\*\*
- Digital Forensics and Cryptography (PLTW)\*\*
- PLT4M
- Principles of Ecology

### Level 2: 11th & 12th Grade

All pathway students must also recertify for CPR and First Aid.

Chemistry 5 credits
Biotechnology Methods Lab++ 2.5 credits

- PLT4M
- Science Fiction
- Technical Writing
- AP Psychology\*\*
- AP Language & Composition\*\*

# Level 3: 11th or 12th Grade

Students must select a minimum of 5 credits from the courses below.

Bioethics 2.5 credits
AP Biology\*\* 5 credits
Topics in MET++ 2.5 credits
Internship 2.5 credits
or 5 credits

- Fitness & Wellness
- AP Calculus\*\*
- AP Statistics\*\*
- AP Environmental\*\*
- AP Physics \*\*

5 credits = Full Year Course

2.5 credits = Semester Course

\*\*Advanced Coursework Options

++Technical Classes

## Skills Thread:

- Developing and Using Models
- Experimental Design
- Engineering Design Process
- Microscopes
- Micropipetting
- Chromatography
- Serial Dilution
- Diagnostic Testing
- Aseptic Technique
- Gram Staining
- Electrophoresis
- PCR programming

- CRISPR
- Analyzing and Interpreting Data
- Using Mathematics and Computational Thinking
- Constructing Explanations and Designing Solutions
- Engaging in Arguments From Evidence
- Communicating Information

### Certifications

- OSHA 10
- CPR/AED/First Aid (AHA)