

## Principles of Biomedical Sciences (Project Lead the Way)

<b>Cluster: Science, Technology, Engineering &amp; Math</b>			
<b>Program of Study: Biomedical Science</b>			
Level 1	Level 2	Level 3	Level 4
<b>Principles of Biomedical Science (PLTW)</b> (8225.HT00.Y) <b>PEIMS Coding N1302092</b> (1 credit)	<b>Biotechnology I</b> (8713.HT00.Y) <b>PEIMS Coding 13036400</b> (1 credit)	<b>Medical Microbiology</b> (8218.HA00.Y) <b>PEIMS Coding 13020700</b> (1 credit) OR <b>Pathophysiology</b> (8219.HA00.Y) <b>PEIMS Coding 13020800</b> (1 credit) OR <b>Biotechnology II</b> (8723.HA00.Y) <b>PEIMS Coding 13036450</b> (1 credit)	<b>Practicum in Science, Technology, Engineering, and Mathematics</b> (First Time Taken) (8741.HA00.Y) <b>PEIMS Coding 13037400</b> (2 credits)

Student work involves the study of human medicine, research processes and an introduction to bioinformatics. Students investigate the human body systems and various health conditions including heart disease, diabetes, sickle-cell disease, hypercholesterolemia and infectious diseases. After determining the factors responsible for the death of a fictional person, students investigate lifestyle choices and medical treatments that might have prolonged the person's life. Engineering principles including: the design process, feedback loops, fluid dynamics, and the relationship of structure to function are incorporated in the curriculum where appropriate. The course is designed to provide an overview of all the courses in the Biomedical Sciences program and to lay the scientific foundation necessary for student success in the subsequent courses.

# Practicum in STEM

## Apply for 2023-2024!



**Interested in a career in the STEM or healthcare field?** Spending two periods during your 12th grade year **shadowing doctors, nurses, vets, physical therapists, and other STEM or healthcare professionals** gives practical application to previously studied knowledge and skills. This capstone, **double-blocked** class gives students **weighted (honors) credit**, valuable industry experience, refined soft skills, and is a great resume-builder and conversation topic during your college and nursing/medical/allied health/graduate school interviews!

**Applications** are available from instructor **Mrs. Angela Zumwalt (Room 101)** starting January 10th, 2023. Printed applications are due on **Tuesday, Feb. 14th, 2023** by 5:00 pm. If you prefer a digital copy, you can find it here: <https://tinyurl.com/AHSStemPracticum>.

Sophomores and Juniors should be sure to take **Anatomy & Physiology (either level)** and **at least one other health science course**, as these are prerequisites for the practicum. *Concurrent enrollment* in one of these health science courses your 12th grade year may be allowable on a case-by-case basis. Contact Mrs. Zumwalt if you think this applies to you.

Mrs. Zumwalt is happy to answer all questions about the practicum and can be reached in **Room 101, 512-841-1569**, or [angela.zumwalt@austinisd.org](mailto:angela.zumwalt@austinisd.org). FAQs (including a link to student YouTube videos!): <https://bit.ly/PracticumFAQs>