

Principles of Biomedical Sciences (Project Lead the Way)

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