



PROJECT LEAD THE WAY: BIOMEDICAL SCIENCE (Honors Credit)* (College Credit)

This program is a **Project Lead the Way** curriculum designed to provide rigorous and relevant curriculum that is project and problem based in order to engage and prepare high school students for the post-secondary education and training necessary for success in the wide variety of careers associated with the Biomedical Sciences.

Principles of Biomedical Science involves the study of human medicine, research processes and an introduction to bio-informatics. Students investigate the human body systems and various health conditions including heart disease, diabetes, sickle-cell disease, hypercholesterolemia and infectious diseases.

Human Body Systems class will engage the students in the study of basic human physiology.

Medical Interventions Students follow the life of a fictitious family as they investigate how to prevent, diagnose, and treat disease. Students explore how to detect and fight infection; screen and evaluate the code in human DNA; evaluate cancer treatment options; and prevail when the organs of the body begin to fail. Through real-world cases, students are exposed to a range of interventions related to immunology, surgery, genetics, pharmacology, medical devices, and diagnostics.

Biomedical Innovation class is a capstone course that gives student teams the opportunity to work with a mentor, identify a science research topic, conduct research, write a scientific paper, and defend team conclusions and recommendations to a panel of outside reviewers.

Students may receive college credit each year by meeting final grade and EOC requirements.

All students applying to this program must meet the following eligibility requirements: Algebra I or recommendation from their Math or Science Teacher.

College Credit

Biomedical Sciences Program

Missouri University of Science and Technology

Students may receive undergraduate credit from the Missouri University of Science and Technology for successfully completing any of the PLTW Biomedical Sciences courses. Students must have taken the course from a PLTW school and received an A or B in the class. In Addition, they must score a 6 or better on the national EOC exam. Credit will be awarded for the first year biology electives in the S&T curriculum listed below. Each course is 3 credits. The fee is \$250/course.

PLTW Course	S&T Course	Credits
Principles of the Biomedical Sciences (PBS)	Bio 144: Introduction to Human Anatomy & Physiology I (A&PI)	3
Human Body Systems (HBS)	Bio 146: Introduction to Human Anatomy & Physiology II (A&PII)	3
Medical Interventions (MI)	Bio 188: Introduction to Biomedical Problems (BP)	3
Biomedical Innovation (BI)*	Bio 175: Introduction to Biological Innovation (BI)	3

More information can be provided by reviewing the Missouri S & T web site:

Students who meet the college credit requirements of Missouri University of Science and Technology will also be awarded dual credit weighting in place of the originally honors weighted course at the high school.

*Biomedical Innovations (BI) does **NOT** offer dual credit weighting however, students can still apply for college credit as indicated above.