



PLTW-Human Body Systems 2025-26 Instructional Plan Created on 08/06/2025

Contact Information

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WHAT ARE PROJECT LEAD THE WAY CLASSES?

Project Lead The Way (PLTW) is a nationally recognized program that provides hands-on, real-world learning in science, technology, engineering, and mathematics (STEM). PLTW classes follow two distinct paths, Engineering and Biomedical. Biomedical classes like Human Body Systems expose students to careers within the medical field. PLTW classes are designed to empower students to develop in-demand, transportable skills such as problem solving, critical and creative thinking, collaboration, and communication using project based learning.

COURSE DESCRIPTION

In *Human Body Systems*, students take a deeper dive into the anatomy and physiology of the human body. Through hands-on laboratory investigations, 3D models, and interactive software, students examine the interactions of body systems as they work to maintain health and support life. Students explore real-world biomedical careers and solve medical mysteries by investigating how the human body is structured and how it functions.

COURSE ACTIVITIES

Below you will find descriptions of the most common activities that students will participate in during the course of each semester.

Throughout the year, examples of projects students will complete:

- Building a human body model from clay on a skeleton
- Measuring lung capacity and heart rate
- Investigating reflexes and brain function
- Using biomedical tools to diagnose and analyze case studies

This course sets the foundation for more advanced PLTW Biomedical Science courses such as *Medical Interventions*, and *Biomedical Innovation*.



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GRADES - Click here for → [YWLA Grading Policy](#)

Major (Test, Projects, Writing)	60%
Minor (Notes, Daily Work)	40%

Classroom Resources

- PLTW Course Teacher Resource
- PLTW Course Student Resource
- Google Classroom
- syGlass Virtual Reality
- Vernier, Carolina, and other Science company instruments and resources.
- Internet searches for research

Fall Semester Exam Date:

December 18, 2025

End of Course Exam Date:

May 21, 2025

COURSE OBJECTIVES AND TOPICS

- Anatomy and physiology of major body systems
- Muscle and bone identification and movement analysis
- Brain structure and neurological disorders
- Cardiovascular and respiratory system function
- Homeostasis and feedback loops
- Biomedical problem-solving and case studies

Optional Materials/Resources:

Google Scholar, National Institute of Health, National Library of Medicine

Please feel free to reach out with any questions or concerns. We are excited to work together to make this a successful year of learning!
