

**Course Information Sheet****Course Name: PLTW Human Body Systems****Instructional Material: Project Lead the Way-Human Body Systems****Semester One:**

Week	Topic
1	Introduction to HBS: Course Overview, Organ Systems, and Homeostasis
2	Identity: Forensic Anthropology and Identifying an Individual
3	Skeletal System: Structure, Function, and Bone Analysis
4	Skeletal System: Joints, Movement, and Muscle Anatomy
5	Nervous System: Brain Anatomy, Lobes, and Communication
6	Nervous System: Neurons, Action Potentials, and Reflexes
7	Sensory System: The Eyes, Ears, and Perception
8	Communication: Endocrine System, Hormones, and Feedback
9	Endocrine Disorders: Diabetes and Thyroid Problems
10	Food & Digestion: Digestive System Anatomy and Function
11	Metabolism: Cellular Respiration and Energy Production
12	Nutrition: Macronutrients and Calorie Count
13	Urinary System: Kidneys, Nephrons, and Filtration
14	Urinary System: Fluid Balance and Urinary Disorders
15	Immune System: Lymphatic System and Innate Immunity
16	Immune System: Adaptive Immunity and Vaccines
17	Biomedical Innovations: Prosthetics and Medical Devices
18	First Semester Review & Exam

**Semester Two:**

Week	Topic
19	Cardiovascular System: Heart Anatomy and Blood Flow
20	Cardiovascular System: Blood Pressure, EKG, and Heart Conditions
21	Respiratory System: Lungs, Gas Exchange, and Respiration
22	Respiratory System: Lung Capacity and Respiratory Diseases
23	Genetic Disorders: Pedigrees and Inheritance Patterns
24	Genetic Disorders: Identifying and Diagnosing Disorders
25	Gene Therapy: Cutting-Edge Treatments and Ethics
26	Disease: Causes, Transmission, and Epidemiology
27	Biomedical Technology: Medical Imaging and Diagnostics
28	Tissue Engineering: Regenerative Medicine and Stem Cells
29	Public Health: Health Promotion and Disease Prevention
30	Capstone Project: Case Study Analysis and Problem Solving
31	Capstone Project: Research and Solution Development
32	Capstone Project: Creating a Formal Report and Presentation
33	Career Exploration: Careers in the Health and Medical Field
34	Professional Skills: Medical Terminology and Ethics
35	Portfolio Development: Showcasing Labs and Projects
36	Course Review & Final Exam