



Course Description:

In the Human Body Systems (HBS) course, students examine the interactions of body systems as they explore identity, communication, power, movement, protection, and homeostasis. Students design experiments, investigate the structures and functions of the human body, and use data acquisition software to monitor body functions such as muscle movement, reflex and voluntary action, and respiration. Exploring science in action, students build organs and tissues on a skeletal manikin, work through interesting real-world cases, and often play the role of biomedical professionals to solve medical mysteries. Students practice problem-solving with structured activities and progress to open-ended projects and problems that require them to develop planning, documentation, communication, and other professional skills.

Course Outline:

Unit	Topic Sequence:
1	<b>Road to Rehabilitation:</b> In this unit, students explore the human <u>skeletal</u> and <u>muscular</u> systems as they gain the knowledge and skills they need to design a solution for their assigned patient. Throughout the unit, students gather medical evidence and information about their patient and use what they learn along the way to help them develop a comprehensive health and wellness plan for the patient.
2	<b>Research Ready:</b> In this unit, students will be researchers in a lab who are especially interested in exploring how the brain and other parts of the <u>nervous</u> system change as a person ages and how the <u>endocrine</u> system controls how a person’s body carries out various processes. The research laboratory is dedicated to solving problems that help unlock the mysteries of the communication network in the body—the nervous and endocrine systems.
<b>1st Semester Exams</b>	
3	<b>Adventure Awaits:</b> In this unit, students join a team of expedition leaders who escort adventure travelers through a series of activities and events in extreme or remote environments. They are tasked to ensure the health and wellness of their group— focusing on the <u>cardiovascular, respiratory, and immune systems</u> —as they identify and address health risks or challenges travelers may encounter in these environments. They investigate pathogens native to an assigned environment and interventions to prevent and treat those pathogens. Students use what they have learned to work together to respond to an emergency medical incident that happens on an adventure trip, presented in an interactive simulation.
4	<b>Patient Perspectives:</b> In this unit, students are biomedical science advisors working on the development of an interactive exhibit. <u>Ins and Outs of the Body: Patient Perspectives</u> will combine art and storytelling into an immersive experience that spotlights the stories of real patients to investigate the structure and function of the <u>urinary and digestive systems</u> .
<b>2nd Semester Exams / End of Course Assessment</b>	

\*\*One week is reserved each semester to review before the Semester Exam or End of Course Assessment (EOC)\*\*

This PLTW course will allow the student to earn college credit at a number of universities. By earning a passing score on the End of Course Assessment (EOC) a student can submit for [college credit](#). Because of the number of options available, please see your course instructor or counselor for more details on how to take advantage of this great opportunity.

Primary Resources:

**Google Classroom:** Students will join this during the first class. All assignments and due dates will be posted here.

**PLTW Portal:** The PLTW website will have readings, activities, and interactives to guide our work all year.

## Grade Breakdown:

Semester Grade	Practice (Daily Work)	Formative (Labs, Quizzes, Activities)	Summative (Tests or Large Projects)
80%	10%	30%	60%
20%	Semester Exam		

## Grading Scale:

Grade	Percent	Grade	Percent	Grade	Percent	Grade	Percent
A+	97-100	B+	87-89	C+	77-79	D+	67-69
A	93-96	B	83-86	C	73-76	D	63-66
A-	90-92	B-	80-82	C-	70-72	D-	60-62
F Below 60							

## Late Work/Missing Work Policy:

Mukwonago Area Schools believes that feedback is an integral component to student success in teaching and learning. Mukwonago High School expects that all students will turn in work by the intended due date to receive full credit and necessary feedback. Students will have the opportunity to turn in practice and formative assessments up to 2 school days late to receive partial credit.

- **Full Credit:** Students *might* receive full credit if the practice or formative assessment is turned in on the due date.
- **Partial Credit:** Students will receive partial credit if the practice or formative assessment is turned in up to two school days after the due date.
  - HBS partial credit policy: If an assignment is late, but we have not gone over the answers, the highest score that can be achieved is an 80%. After the answers have been discussed, the highest score that can be achieved is a 50%.
- **Zero Credit:** Practice or formative assessment can be turned in past the two days to remain eligible for reassessment; however, no credit will be given.

## Assessment Policy:

Assessments are used to measure student learning of essential learning standards within a unit of instruction.

**Practice Work** (Ex. In-Class Work, Homework): Unit assignments provide a means for the student to practice content before a formative assessment check-in with their teacher. This is when students should learn and practice new content and skills. These are generally graded by completion. **\*Not eligible for retake**

**Formative Assessments** (Ex. Labs, Quizzes, Activities, Small Projects): These assessments are learning checks throughout the unit for both the student and teacher to see how well the student is learning the content and skills required for that unit. Feedback should be given during or after the assessment so students can learn what they already know and what they need to improve on. **\*Not eligible for retake**

**Cumulative Summative Assessments** (Ex. Projects, Essays, Presentations, Semester Exams): These end of unit assessments are final products of learning in which students have had several opportunities to make adjustments based on feedback. Retakes are not provided for these types of end of unit assessments. **\*Not eligible for retake**

**Comprehensive Summative Assessments** (Ex. Test): This end of unit assessment uses various types of questions that students have studied but not previously seen. Students are eligible to reassess if the following criteria are met: practice and formative assignments for the unit have been completed and turned in prior to the summative assessment, student meets with their teacher to schedule a reassessment, and demonstrates relearning within 2 weeks of receiving the original assessment. The reassessment grade will replace the original summative grade, regardless if the new grade is lower than the original assessment. **\*Eligible for retake**

### Materials/Supplies needed:

- Charged Chromebook **and** Charger (bring both every day)
- Pencils, Pens, and/or Highlighters
- Notebook or Loose Leaf Paper
- 3-Ring Binder, 1 inch or larger (a folder will work, although we give many handouts)
- Choose one: kleenex box or box of latex-free gloves

### Expectations & Classroom Conduct:

- HBS isn't a required course, however it can count for one of your three science credits to graduate. Talk to your counselor if you have any questions about this.
- Homework, labs, and any other classwork completion is expected. Work is expected to be turned in at the beginning of class, on the day it is due (unless stated otherwise). If work is not completed by this time, it will be considered late. See the school's Late Work Policy above.
- During class time when material is being presented or instructions are being delivered you are expected to be respectfully listening and participating in discussions. The information being shared with the class is important for everyone to hear. Listen to instructions the first time so as to not waste everyone's time.
- Time during class to work should be used for HBS work. This time is provided for working on PLTW-HBS assignments. You are able to get help from me, work with peers, and avoid homework. You will be increasing skills in personal responsibility and self-advocacy.
- Food and beverages are okay to have in class. During class, all food and drinks must remain at desks in the front of the room. Make sure that all garbage ends up in a trash can, the floor and sinks are not garbage cans. Check the area you were in before leaving class. You are expected to clean up after yourself, not the teacher or the janitors.
- Your absence from class can greatly impact your success. When you are absent, please check the Google Classroom first for any details and assignments you have missed from that day. If you still have questions after that, then email or talk to your teacher during work time or outside of class. This class will rely on group work, so your absence affects your peers as well.
- Tardiness will be tracked in Infinite Campus (IC), and the following steps will be taken for each occurrence:
  - 1st Tardy: Verbal warning
  - 2nd Tardy: 10-minute detention with the teacher (must be served within 2 days) and parent contact; administration will be notified through Educlimber.
  - 3rd Tardy: Teacher will submit an IC office referral. Administration will meet with the student, assign an after-school detention, and contact the parent.
  - 4th +: The teacher will submit an office referral in Infinite Campus (IC), and administration will determine appropriate consequences at their discretion.

### Academic Honesty:

The Mukwonago Area School District emphasizes the importance of academic honesty and integrity as essential to education. Students are expected to complete and represent their work truthfully and are held accountable for academic misconduct, including cheating, plagiarism, and misuse of artificial intelligence. Teachers review the academic honesty policy at the start of each course. Consequences for dishonesty vary by offense: the **first offense** results in a zero on the assessment, parent contact, administrative review, and permanent ineligibility for National Honor Society; the **second offense** leads to another zero, a parent meeting with administration, and ineligibility for valedictorian or salutatorian honors; a **third offense** results in withdrawal from the course with a failing grade or audit status, and loss of honors pass privileges.

### Tips for Success:

- ★ Expect to have work to do each day, but if you use class time well, you shouldn't have much homework to do outside of class. Still taking 10-15 minutes to review daily content can greatly improve your understanding and grade in the class.
- ★ Read GC posts and assignment directions carefully. Not only will they help you understand the content more, it may save you time on work you don't have to complete.
- ★ Ask questions and participate in class. When you are engaged and focused, your brain is more likely to retain information.
- ★ Consider who you want to be and what that looks like. Then, consider if you are doing the things to get you where you want to be. If you aren't, start making changes. This applies not just to our class, but to life as well.

*All Mukwonago policies & procedures will be followed and enforced in this class as outlined in more detail in the [Mukwonago High School Student and Parent Handbook](#).*

### Receipt of Syllabus

I have read the course syllabus and class policies for PLTW - Human Body Systems. I understand the rigor of the course and what is expected academically and behaviorally, and accept the terms stated in this document. I also understand that **I will not be allowed to participate in the lab**, which may lead to reduced or zero points on lab assignments, prior to the completion and delivery of this form and the science safety contract.

\_\_\_\_\_  
Student Name (printed)

\_\_\_\_\_  
Student Signature

\_\_\_\_\_  
Date

\_\_\_\_\_  
Parent/Legal Guardian Signature

\_\_\_\_\_  
Date

Parent/ Guardian, please list an email address that I can contact you with in case any questions or concerns arise throughout the school year. This email will also be used if you would like to get summaries about the work we are doing in Google Classroom. You will receive an email within a few days asking if you would like to be a guardian for your student, if you aren't already one. You can then choose to receive updates daily, weekly, or not at all. The summaries will share missing work, upcoming work, and class activity. You can unsubscribe at any time.

\_\_\_\_\_  
Parent/ Guardian Email

Thank you for your help and support. I look forward to enjoying a wonderful year with all of you! ☺