Errata (Spring 2026)

PHYS 205A: UNIVERSITY PHYSICS

School of Physics and Applied Physics, Southern Illinois University–Carbondale
Last updated: January 10, 2026

The following is not a complete list. It is maintained since 2022 Feb 9.

1. 2024 Fall, HW-06 Solutions, Problem 02: Units of acceleration a should be m/s^2, not rad/s^2, everywhere.

2. 2024 Spring, MT-03 Solutions, Problem 04: The numerical values in the final equalities should be swapped. That is, $v_{2i} = 5.0$ m/s and $v_{1i} = 10.$ m/s.

3. 2021 Spring, HW-12, Problem 3d, in the video for Solutions has errors between time stamps 22:50 and 24:20. The correct solution is available in the recording of the lecture dated 20210428 on Gravitational Potential between time stamps 41:30 and 45:05.

4. 2021 Spring, MT-03 Solutions, Problem 6: In the equation for W_f, there should be a negative sign after the fifth equality. That is, $W_f = -2100$ J.

5. 2021 Spring, HW-04A, Problem 3, in the video for Solutions between 18:00 and 19:15 time stamps: evaluation of Δt leads to 0.52 s, not 0.27 s. This error leads to an error in the evaluation of Δx. It should be

$$\Delta x = v_{ix}\Delta t = (3.50)(0.52) = 1.8 \, \text{m/s}. \tag{1}$$

6. 2018 Spring, MT-03 Solutions, Problem 1: In the equation for W, after the second equality, replace $(2 - 0) \to (3 - 0)$, which changes the evaluations that follow there. That is,

$$\begin{aligned} W &= \frac{1}{2}(6 - 0)(20 - 10) - \frac{1}{2}(3 - 0)(30 - 20) \\ &= 30 - 15 = 15 \, \text{J}. \end{aligned} \tag{2}$$