

(Preview of) Midterm Exam No. 01 (Fall 2025)

PHYS 205A-002: UNIVERSITY PHYSICS

School of Physics and Applied Physics, Southern Illinois University–Carbondale

Date: 2025 Feb 15

(Name)

(Signature)

Instructions

1. Seating direction: On even-numbered seats in alternate rows, B, D, F,
2. Total time = 50 minutes.
3. There are 4 conceptual questions and 3 problems in this exam.
4. Equation sheet is provided separately.
5. To be considered for partial credit you need to present your work in detail and organize it clearly.
6. A simple calculator (with trigonometric functions) is allowed.
7. Use of smart devices, including smart watches, is strictly prohibited. They should stay out of reach during the exam.
8. Academic misconduct will lead to a failing grade in the course.

The following is only a guideline.

1. (**5 points.**) On dimensional analysis.
2. (**5 points.**) On graphical analysis of motion.
3. (**5 points.**) On vector algebra.
4. (**5 points.**) On projectile motion.
5. (**10 points.**) On 1-D kinematics.
6. (**10 points.**) On vector algebra.
7. (**10 points.**) On projectile motion.