

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

## **PHYS 500A: MATHEMATICAL METHODS**

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

Date: 2025 Sep 26

1. **(20 points.)** On contents related to HW-01, tentatively on index notation.
2. **(20 points.)** On contents related to HW-02, tentatively on Gradient operation.
3. **(20 points.)** On contents related to HW-03, tentatively on curvilinear coordinates.
4. **(20 points.)** On contents related to HW-04, tentatively on analytic function.
5. **(20 points.)** On contents related to HW-05, tentatively on contour integrals.