

# SLO Addendum to the Course Outline

## Laney College

### PHYS 004C

Student Learning Outcomes	Assessment Method
1. Explain and discuss both verbally and in written language the physics concepts listed in course content, as well as their relevance to everyday events and circumstances in a broad interdisciplinary context.	Examinations with questions and situational problems that require students to demonstrate conceptual understanding of physics in explaining, setting up, and solving these everyday type problems. Laboratory exercises and lab reports that require students to work and communicate together to carry out measurements using their conceptual knowledge of physics.
2. Use algebra, trigonometry, and calculus to set up mathematical descriptions of physical systems and to calculate measurable quantities that provide an understanding of the physical environment in terms of the concepts listed in the course content. Course content consists of optics, interference, relativity, quantum physics, atoms, molecules, solids, nuclei, particle physics, astrophysics.	Examinations with questions and situational problems that require students to use algebra, trigonometry, and calculus in setting up and solving these problems.
3. Set up laboratory equipment safely and efficiently, plan and carry out experimental procedures, identify possible sources of error, implement techniques that enhance precision, reduce and interpret data, and report verbally and in written language the experimental data, results, and assessment of reliability.	Laboratory exercises and lab reports that require students to work and communicate together to set up and carry out measurements using their understanding of physical equipment and methods of data acquisition and reduction.