

The Essentials of Writing in a Physics Course—Interview with Professor Mary Odekon

1. Writing is a means of “explaining problem-solving in a way that goes beyond...basic equation-writing.” Students’ writing should convey both their own comprehension of a problem, prompt, concept, etc. and their ability to explain the information to others without having to resort to math or formulas.
2. Students are not expected to fully comprehend every aspect of a scientific publication or lab report.
3. Tutors are not expected to have background information in physics.
4. There is no standard format to write a lab report or a homework assignment in physics, due to varying purposes of lab reports and assignments in different classes.
5. Creativity lies in the varying ways students can approach problems. Open-ended assignments focused on encouraging students to think about how to approach problems with no universal answers foster creativity.
6. In order to express ideas clearly, arguments should be concise, easy to follow, and focused. They should be specific enough to avoid resembling a reiteration of obvious facts.
7. Writing should include all required specifications outlined in the assignment prompt (ex. sections of a lab report required, conventions such as including numerical units), and should contain “subtlety of thought” that addresses the limitations of an analysis.
8. Content and quality of the writing takes precedence over page limits.
9. **There is no standard format of writing, no “typical” writing assignment to use as a model—even lab reports differ widely among themselves—no strict requirements regarding usage or avoidance of academic jargon. The over-arching focus is on clear, concise writing that shows depth of thought and comprehension of a problem or prompt, that comments on and fully explains the student’s thought process without resorting to equation-writing.**