

Grading Rubric for Papers in Physics 480W

The Matrix

title of reviewed paper: An exploration of Zeeman Splitting

Table 1: grading rubric: each evaluative category (row) is scored on a 3-2-1 basis. Each category is weighted (w , shown next to the category descriptor below) either 2, 1, or 1/2. The total number of points possible per row is then $3 \times w$, (i.e. 6pts are possible for row 1). There are 9 total rows, and 30 total points possible. The grades recorded will be, however, a score out of 100 arrived at by dividing the student's score by the total possible, etc., etc. Note that physics content accounts for 18/30 of the total, or 60% of the total grade. Grammar & composition, and formatting account for 40%.

	Proficient (3pts.)	Intermediate (2pts.)	Developing (1pt.)	total-whiff (0pts.)	Score
Physics Content, 18 pts. possible					
Correctness (w=3)	⊗				9
error analysis (w=2)	⊗				6
completeness (w=1)		⊗			2
Grammar & Composition, 9 pts. possible					
level of prose composition (w=1)		⊗			2
level of sentence syntax (w=1)		⊗			2
diction (w=1/2)	⊗				1.5
“Math as Prose” (w=1/2)	⊗				1.5
Formatting, 3 pts. possible					
L ^A T _E X formatting (w=1/2)		⊗			1
AIP formatting (w=1/2)		⊗			1

Comments: Total Points = 26 out of 30, giving 86 %.

1. Second sentence of introduction has a couple of syntax errors
2. FIG. 1 appears to have more than just quantum numbers as referred to in the text.
3. There is a symbol in latex that gives a nice calligraphic H for the Hamiltonian, if you would like to use it I think the command is (forward slash) mathcalH
4. Does Levels need to be capitalized every time when referring to FIG.3?
5. Minor syntax errors in sentences 4 and 5 in first paragraph of section IV
6. I don't think the first citation should have a question mark
7. The paper has no mention of isotopes until the results section, it could be useful to explain why there are different I and g_f values for each isotope.
8. I found the paper to be very good overall and shows pretty good insight to the optical pumping process and good prose when dealing with the math. However, there were a few errors in syntax, which is typical and the talk about 2 isotopes kind of comes from nowhere in the results section. You may or may not want to include more about the quadratic Zeemann splitting (like a plot of Rb 85 splitting).