

DEPARTMENT OF PHYSICS • University of Toronto, Toronto, Ontario, Canada M5S 1A7.

February 8, 2005

Dr. David Bailey Associate Chair for Undergraduate Physics 60 St. George St. Toronto, Ontario M5S 1A7

Dear Dr. Bailey,

It has come to my attention that you are currently undergoing a review of first year physics undergraduate courses. As an active teaching assistant in this department, I am hopeful that you will consider suggestions from my colleagues and myself.

This is my second year as a demonstrator for the PHY 138/110 Y labs. PHY 138Y is the largest class in this department, and should be viewed as a potential source of physics majors and/or specialists. Although it is ostensibly intended for life science majors, many undecided first year science undergraduates take PHY 138Y as a matter of course. If the material is presented in an engaging and thought-provoking way, some of these students may be swayed into becoming serious physics students. Although in principle this fact may be considered in planning PHY 138Y, in practice I do not find it to be so for the following reasons:

- There is no training for lab TAs other than a brief introduction to pedagogical principles and a language/communications test. Apparently, the biology department has a 3 hour TA training session every other week on lab equipment, experiment procedures, etc. With the number of PHY 138Y labs available, it is impossible for TAs to be fully prepared for any one of them, especially in the second term.
- There are too many labs available in the second term, some of which do not work well. I do not think the students benefit from this breadth of choice. Aside from the strain put on the technical staff by the impossible task of keeping the equipment usable, most students do not have a clear idea of which labs interest them. In contrast, almost any of the labs is potentially interesting to most students if taught correctly. Limiting the number of labs would allow us as TAs the time to not only be more prepared, but also to develop our own teaching techniques for each lab.

Catherine Robin • 416-978-5177 • crobin@physics.utoronto.ca

Comment [T1]: We hope you are not an inactive one! Omit

Comment [PD2]: excellent first paragraph - establishes your credentials and lets the reader know what the letter is about. A brief explanation as to why this is also from your colleagues would be in order.

Comment [PD3]: insert comma?

Comment [PD4]: these could be made into one elegant sentence - omit 'I think' - we know it's your opinion!

Comment [PD5]: nonetheless they do
it - don't overstate your case

Comment [PD6]: insert comma

Comment [PD7]: omit, OR '..allow the TAs...'

• There does not seem to be an easy way for interested students to switch from PHY 138Y to second year physics courses without losing a year. Perhaps there could be a tutorial-style summer course for them, taught by a senior graduate student. In the lab, we could allow students who express an interest to join some of the PHY 140Y labs in the second term.

Since PHY 138Y is really a pure physics course (very few, if any, life science applications are considered), this department has the opportunity and the obligation to use it to increase student interest in physics. I believe other graduate students will conquer with the suggestions I have proposed here to help with this 'mission'. These and other changes could both encourage those who may be interested in majoring in physics, and improve the PHY 138Y experience of those who are not.

Sincerely,

Catherine Robin (PhD candidate) **Comment [T11]:** to stick to the accepted format for formal letters, you have to right justify this, since your

address and paragraphs have that format

Comment [PD8]: my entire section is nothing but! again don't overstate

Comment [PD9]: I think you mean

Comment [PD10]: great last sentence

concur

COMMENT: Excellent letter, Catherine. You make some very good points, and express them concisely and well. Don't overstate your case though – it's quite powerful enough. Well organized, well laid out. I think David would enjoy hearing from you, and I suggest you consider my comments and send it to him.

Tony

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