

## Foreword

The Department of Physical Sciences supports and encourages the development of new teaching resources, including textbooks, by faculty members. To ensure the maintenance of academic standards, any required textbook must meet the selection criteria outlined below. Textbook development is a form of scholarly activity, and peer review is a fundamental cornerstone of any scholarly work.

1. Textbook selection will be performed by a committee composed of faculty who are teaching the course or may be expected to teach the course in the future. A committee will be struck for each selection process.
2. Each specific textbook selection committee will remain dormant during the three-year adoption period, unless there is a call for replacement of the textbook before the end of the adoption period.
3. For students in multi-section courses that are delivered in two parts (e.g. CHEM 101/CHEM 102, CHEM 261/263, PHYS 124/126, etc.), there is a need for consistency and a common experience. Pursuant to this, there can only be one required textbook used for each multi-sectioned Physical Science course.
4. In order for a text to be eligible for consideration by a textbook selection committee, it must have gone through an external peer review process similar to the procedure publishing houses such as Nelson, Pearson, Wiley, etc. use to vet their texts.
5. It will be the responsibility of each committee to create short lists of admissible texts that satisfy the criteria contained within this document.
6. Official course textbook adoption will proceed at the discretion of the selection committee. The textbook chosen by the selection committee, determined by a majority vote, will be a required resource for all sections of that specific, multi-sectioned course.
7. The textbook that is approved by the textbook selection committee must be used for a minimum of three years or until the current edition expires, or for a shorter period of time at the discretion of the textbook selection committee.
8. Supplementary material such as workbooks, course notes, solutions manuals or software can be used along with the official departmental textbook.

## ■ observations

The MacEwan Mission, MacEwan Vision, MacEwan Mandate, Academic Freedom policy, and the AGC University-Wide Standards for Interim Title of Assistant Professor recognize, support, and promote pedagogically focused scholarly activity, including textbook development.

The Mission, Vision, and Mandate are available at

<[http://www.macewan.ca/web/services/academic\\_affairs/about/DetailsPage.cfm?id=488](http://www.macewan.ca/web/services/academic_affairs/about/DetailsPage.cfm?id=488)>

The first sentence in the Foreword to the Guidelines states, “The Department of Physical Sciences supports and encourages the development of new teaching resources, including textbooks, by faculty members.” In my opinion, none of the guidelines actually supports this statement.

1. Guideline 2 and 7 provide the department with the ability to abandon any chosen textbook at any time. This escape clause significantly weakens these Guidelines and effectively puts the department back to the current practice regarding textbook selection. I am not aware of anyone who disagrees with the existing practice!

2. Guideline 3 requires consistency and a ‘common experience’. How is this applied to students transferring from other institutions? Institutions grant transfer credit based on a comparison of course material. The textbook is a small consideration, and I know of ZERO institutions that refuse to grant transfer credit unless the same textbook is used. Lucio and I are involved with ACE (Alberta Chemistry Educators), a casual organization comprised of university, college, and high school instructors interested in improving chemistry (and science) education in Alberta. There is representation from every University, most colleges, and several high schools in Alberta. At a meeting two years ago, the university and college instructors at ACE decided that 80 % course homology was sufficient to grant transfer credit. I should point out that there is almost 100 % homology between the material taught from ■ and the material taught from General Chemistry (Petrucci) at MacEwan.

3. Consider the statements in guidelines 3 and 6:

Guideline 3: “there can only be one required textbook”

Guideline 6: “The textbook chosen ... will be a required resource for all sections”

From this, it appears impossible for an instructor developing a textbook or testing another textbook (published or not) to have their students use this alternate textbook. Indeed, these statements could be interpreted in such a way to prevent an instructor from using any alternate textbook.

The only option appears to be all instructors to agree to use the draft textbook the very first time it is used with students. I submit that student feedback is critical to developing quality instructional material and that this development is an iterative process (just like teaching

improves with each iteration). With any developing a textbook, is it a good idea for every instructor and every student to use a developing textbook the first time it is used? (see below)

4. Guideline 4: do publishers have standard peer review process? what is it? who determines if a textbook developed at MacEwan has gone through an acceptable peer review process? Furthermore, from my conversation with other authors and publishers (I called two today), most authors developing instructional materials are expected to use the textbook with their own class before the publisher invests significant resources into developing the textbook. During the multi-year development with the publisher, the author uses the developing text with their students. Other instructors become involved as the textbook matures. FYI: this is the process I am following!

Guideline 4 requires the textbook to have “gone through – completed? – the entire peer review process” in order to be eligible for consideration by a textbook selection committee. I do not see how this is possible given the points articulated in 3, above.

The traditional publisher model is just that, traditional. In the past 15 years, numerous alternative models have developed and brought successful products to market. Amazon, eBay, and Kijiji have changed consumer patterns. Wikipedia has transformed information repositories. It is commonplace to have independent labels in the music industry --- this transition is now occurring in the publishing industry. Some institutions are developing their own textbooks (UBC and Dalhousie are developing first-year chemistry resources). The vagueness of this guideline makes it easy to be interpreted and applied so that no textbook being developed at MacEwan can be considered for use at MacEwan.

5. Guideline 6: what is meant by, “Official course textbook adoption will proceed at the discretion of the selection committee.”?

6. The 08 December Criteria explicitly encompassed supplementary resources, such as Dr. Hilts’ workbooks. Guideline 8 now explicitly excludes all supplementary resources. Instructors can use any supplementary resource they wish. Conveniently, Dr. Hilts has co-authored the Solutions Manual and authored two workbooks based on the Petrucci text.

7. Comparing these Guidelines with the 08 December Criteria, I observe that any consideration of cost as an important factor in the textbook adoption decision has been removed. I believe that cost should remain as a guideline (if we keep these guidelines at all). For reference, two years ago, Petrucci sold for 170 \$ at MacEwan, sold for 160 \$ at the UofA, and 150 \$ at the UofT. (These numbers are approximate, I can’t find the original reference.)

## **SUMMARY AND RECOMMENDATIONS**

**I submit that these Textbook Adoption Guidelines effectively prevent an instructor developing a textbook from doing so within the Physical Sciences Department at Grant MacEwan University. These Guidelines appear antithetical to the MacEwan Mission, MacEwan Vision, MacEwan Mandate, Academic Freedom policy , the AGC Standards, and the Foreword of these Guidelines.**

**I would like it explained how another MacEwan faculty member, choosing to develop a textbook as part of their scholarly activity, can do so. Literally from birth of the idea to having a first edition that can be adopted at another institution.**

**Before the Physical Sciences Department proceeds any further, I submit these guidelines must be sent to all MacEwan faculty for their feedback, to AGC for feedback, to the Research Office and all of Faculty Commons for feedback, and to the committees who drafted the MacEwan Mission, MacEwan Vision, and MacEwan Mandate for feedback.**

This year,

a student taking CHEM 101 and CHEM 102 at MacEwan would pay

$$180 \$ (\text{Petrucci}) + 2 \times 15 \$ (\text{lab manuals}) = \mathbf{210 \$}$$

a student in a class where Dr. Hilts' workbooks are mandatory would pay

$$180 \$ (\text{Petrucci}) + 2 \times 15 \$ (\text{lab manuals}) + 2 \times 40 \$ (\text{workbooks}) = \mathbf{290 \$}$$

a student in a class using [REDACTED] would pay

$$2 \times 15 \$ (\text{lab manuals}) = \mathbf{30 \$}$$

[REDACTED] is currently free in electronic form. A color printout of the book is available for 50 \$ in the MacEwan bookstore.

A custom edition of Petrucci sells for 140 \$.

The optional Petrucci Solutions Manual is 80 \$.

The [REDACTED] *Solutions Manual* is free in electronic form.

6. Section 8 allows for individual instructors to use any supplementary resources they wish. Conveniently, Dr. Hilts has co-authored the Solutions Manual and authored two workbooks based on the Petrucci text. This section confirms that he is able to use these resources.