

## A Science-Editing Course for Graduate Students

In fall 1996, a graduate student in science and technology journalism asked me for instruction in science editing. The outcome was a science-editing course that I now have given 10 times to graduate students at Texas A&M University. How does this course function? What topics does it address? What teaching materials are used, and what work is assigned? What have some of the outcomes been?

The student and I decided that the instruction could best be given as a “directed-studies” course—that is, an ad hoc course designed to suit the interests of one or more students. Because directed-studies courses can be scheduled more flexibly than standard courses and need not reach the usual minimal class size to be given, the course has continued to be offered under the directed-studies rubric.

The science-editing course typically meets for 2½ to 3 hours once a week for one semester (14 weeks). Sometimes, however, it is given during the summer, in which case the schedule is compressed. To accommodate the students, a mutually feasible meeting time is decided on after the students who wish to enroll have determined what other courses they will take.

Major topics or themes of the course include reasons for editing, fundamentals of manuscript editing, basics of editing various types of science copy (including science articles for general readerships, scientific papers, grant proposals, books, and conference proceedings), the author-editor relationship, editing materials by nonnative speakers of English, ethical issues in science editing, career opportunities in science editing, and editorial humor. The students use two textbooks: *The Copyeditor's Handbook: A Guide for Book Publishing and Corporate Communications*, 2nd edition, by Amy Einsohn (Berkeley: University of California Press; 2006) and *Editing and Publication: A Training Manual* (Manila: International Rice Research Institute; 1991). Other readings include articles on science editing and related topics and examples of science editing.

Written work for the course consists mainly of brief editing exercises and three

longer assignments. Items for students to edit as exercises include sentences containing copyediting problems, abstracts and brief articles into which copyediting errors have been introduced, short excerpts from English-language materials by authors who have various native languages, and a reference list containing an impressive number and variety of errors. The longer assignments consist of editing a piece for the public that I provide or the student obtains; editing a scientific paper, grant proposal, or other technical piece that I provide or the student obtains; and, as a final project, completing another substantial piece of science editing or writing a paper on a topic or issue in science editing. In addition to submitting the final project, the student gives a class presentation based on it. Some of the materials for students to edit as practice and some of the other exercises are ones I developed; others have been shared by science-editing colleagues or drawn from published sources. Students registering for three credit hours for the course, as most do, must complete all the written assignments. Recently, students have also had the option of doing less written work and earning one or two credits.

Course sessions typically consist mainly of discussion of the reading and the written assignments. Some sessions contain guest presentations, either in person or by speaker-phone; guest speakers have included editors from the Texas A&M University Press, the editor of the astronomy magazine *StarDate*, a manuscript editor at a scientific journal, and a freelance science editor. In addition, students give brief presentations on stylebooks in the sciences and on Web sites of use to science editors. Often, students and I bring items of editorial interest, including examples of editorial snafus, for show-and-tell; my contributions include items that have arisen in the preceding week in my work as an editor and an author. The last session of the course generally includes dinner at my home.

Since its first offering in spring 1997, the course has been given whenever demand has existed. It has thus been given 10 times to groups of two to eight students. In total,

40 students, nearly all of them master's-degree students in science and technology journalism, have taken the course.

A few students have gone on to take an advanced directed-studies course in science editing. This course tends to be highly individualized and to be given to only one or two students at once. Activities done by some of the students include editing book chapters and comparing the editing with that by a professional editor, reading parts of style manuals in the sciences, reading a book on proofreading and doing the associated exercises, and helping to edit fellow students' theses.

Editorial interns for *Science Editor*, who serve mainly as staff writers for the publication, have been drawn largely from graduates of the course. Interns who have taken the course come with sufficient knowledge of science-editing issues and sufficient editorial skills to begin the internship without extensive orientation.

Several graduates of one or both science-editing courses have gone on to science- or technology-editing jobs at journals or magazines, in agricultural extension, or in

industry. Other graduates have said that the editorial perspective gained has aided in their work as writers. One student, who entered the course viewing editors as disparaging and intimidating, mentioned having been amazed to learn that attributes of good editors include tact.

Some graduates of the basic science-editing course have recommended that it be required for students in the science and technology journalism master's program. Also, some graduates and at least one administrator have suggested that the course be made a standard offering rather than staying under the directed-studies rubric. In any case, I hope the course will long continue. It offers students useful and salable skills, it helps to develop the next generation of science editors—and for a science-editing enthusiast, it's lots of fun to teach.

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### **Correction:**

On page 205 of the November-December 2006 issue, a passage in the Unbound column referred to plos.org (for Public Library of Science) instead of PubMed Central. The former publishes only original research articles. It does not serve as a repository for articles from elsewhere.